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Industrial Canada

Vol. XXII., No. 9 TORONTO, JANUARY, 1922 $4.00 per Year

Canadian Products

Annual Review Number

Containing a series of valuable reports, specially prepared by leading Canadian manufacturers, on conditions during the past year in the various branches of manufacturing Industry, together with a forecast for 1922. Also a number of Trade Reports from other countries.

Published by the CANADIAN MANUFACTURERS ASSOCIATION INCORPORATED
HEAD OFFICE TORONTO BRANCH OFFICES MONTREAL, HAMILTON, WINNIPEG, VANCOUVER, AMHERST & OTTAWA



Always packed in the Green Drum

May 1922 be prosperous

and give you

"More joy per minute"

With the same CERTAINTY as we know Canadian carbide will give you

"More gas per pound"

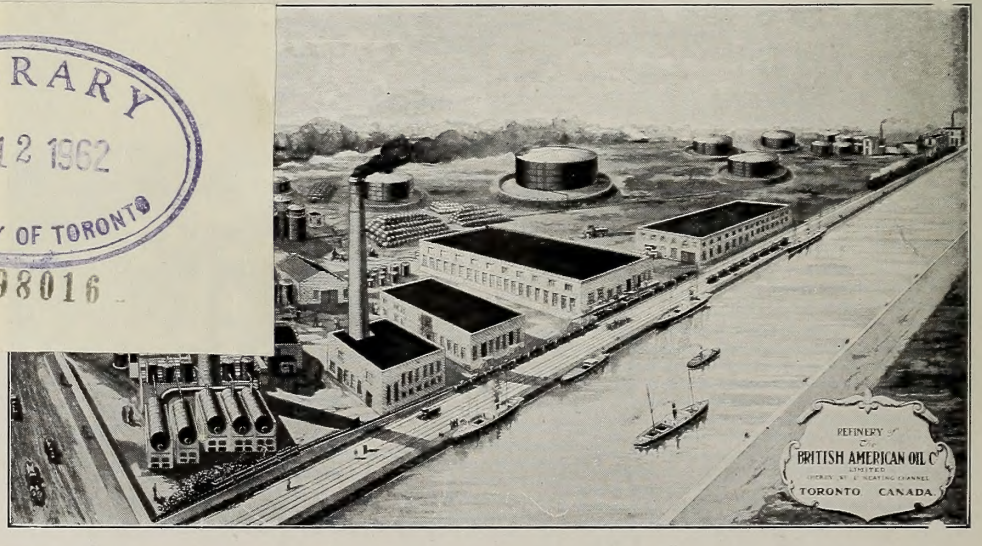
Canada Carbide Company, Limited

MONTREAL, Que. | ST. CATHARINES, Ont. | WINNIPEG Man.

THE BRITISH AMERICAN OIL CO., LIMITED

REFINERS—MANUFACTURERS—DISTRIBUTORS

Gasolene—Benzine—Kerosene—Industrial Lubricants—Paraffine Wax
Motor Oils—Fuel Oil—Road Oils—Petroleum Coke



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Orillia
St. Catharines
etc.

Western Branches:
Winnipeg
Brandon
Regina
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Calgary
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Saskatoon
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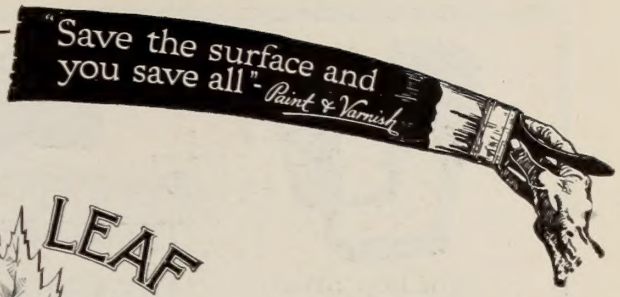












MAPLE LEAF
M FINISHES THAT ENDURE L
QUALITY

Paints and Varnishes

—made in Canada

Maple Leaf Paints and Varnishes:

Maple Leaf Paint	Maple Leaf Creosote Shingle Stains
Maple Leaf Flat Wall Colors	Elastilite Varnish
Maple Leaf Colors in Oil	Granitine Floor Finish
Orolite Oil Finish	"Floglaze"—the finish that endures

The Imperial Saving System and Maple Leaf Quick Drying Coach and Automobile Colors:

Primers	Colors in Oil	Gear Varnishes
Fillers	Colors in Japan	Rubbing Varnishes
Coach Enamels	Body Varnishes	Finishing Varnishes

We also Manufacture:

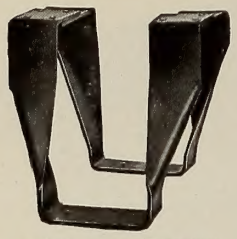
Japans	Paint Dry Colors	Printing Ink Dry Colors
Driers	Insulating Varnishes	Wagon and Implement Colors
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	Lacquers	Stains

Write us for color cards, descriptive literature and prices

THE IMPERIAL VARNISH & COLOR CO. LIMITED

HEAD OFFICE TORONTO CANADA

MONTREAL WINNIPEG VANCOUVER

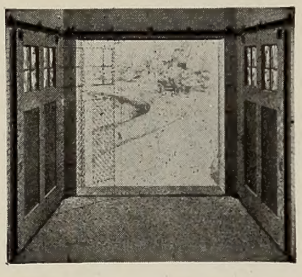


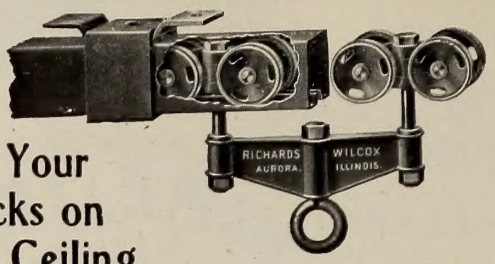
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They never let go! Stronger than malleable. All sizes and styles for all kinds of work. Save space and time in erection.

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Angle Doors, Parallel Doors etc. Special jobs receive the prompt attention of our engineering department. Let us know your requirements.





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A Richards-Wilcox Carrier System—either I-Beam or Trolley—will pay for itself in one year on actual pay-roll saving, not to mention the increased efficiency. Occupies no floor space. Always ready for use. Operates easily, one man can handle 2,500 lbs. Trolley carriers made in sixteen styles and sizes for loads up to 2,500 lbs. For heavier loads use I-Beam Equipment.

CATALOGS UPON REQUEST

Richards-Wilcox Canadian Co. Ltd.

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"A hanger for any door that slides"

"R-W" TROLLEYS ARE BEST FOR ALL SLIDING DOORS



Specified by leading architects and engineers throughout Canada and the United States. "A hanger for any door that slides."

FIRE DOORS AND FIRE DOOR HARDWAREWITH UNDERWRITERS' LABEL

All styles, single or double, sliding or swinging. A fire door with labeled hardware is the surest way to prevent fire from spreading.



Some Manufacturers didn't know this—

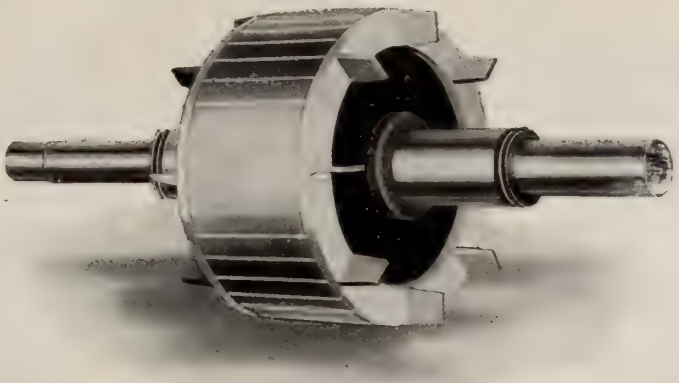
If you own or rent your own warehouse you are probably paying for its upkeep in certain slack weeks or months when it is not being used.

If you use Howell Warehouses you only pay for storage while goods are in our hands. There is certainly an advantage gained with a stock of goods in Toronto ready for immediate distribution, but the advantage ceases to be practical the minute you have to pay too much for it. This is just one more reason why you should get in touch with Howells. And now is a good time to get figures.

The HOWELL WAREHOUSES Limited.

General Mercantile Distributors

311 King st East, TORONTO. Phone Main 7580



It gives double life to your Motor

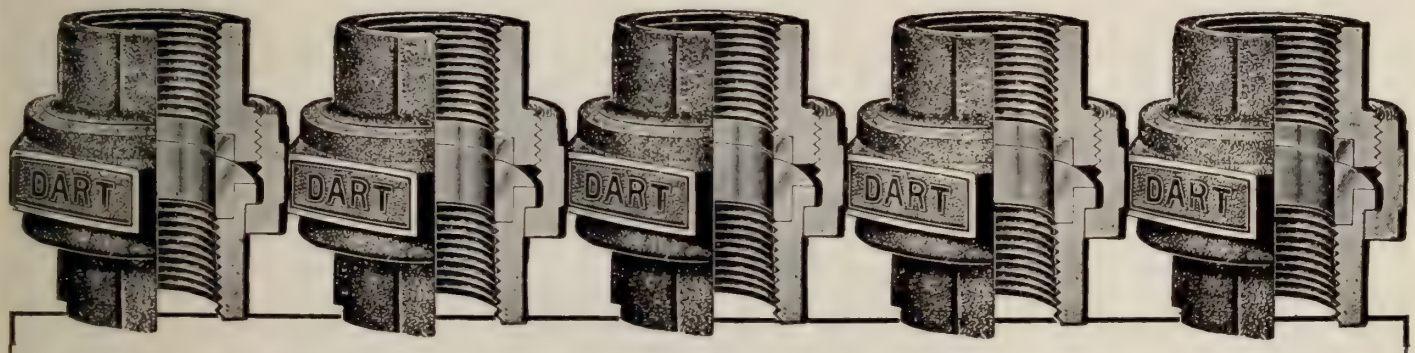
This is the cast winding Rotor as used in the smaller sizes of Canadian Crocker-Wheeler motors. The rotor bars, short circuiting rings and fans are all of the same material and are cast in a single operation. Thus there can be absolutely no breakdown between rotor bars and rings which is a real guarantee of "double life to your motors."

THE CANADIAN CROCKER-WHEELER COMPANY LIMITED

HEAD OFFICE AND WORKS: ST. CATHARINES ONT. MANUFACTURERS AND ELECTRICAL ENGINEERS DISTRICT OFFICES: TORONTO & MONTREAL

ALSO ALL BRANCHES OF *Northern Electric Company* LIMITED

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Dart Unions are a Permanent Investment in a Pipe Line

The Bronze to Bronze feature eliminates all possibility of deterioration at the vital part. Bronze will not rust or corrode.

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Never scrap Dart Unions—use again—they're always efficient.

Manufactured by

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PRODUCTS
Of Every Description



NAILS
For all Kinds of Manufacturing Purposes



CUT NAILS
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Boat Nails, Clinch Nails
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All Varieties of **SCREWS** Both Wood and Machine Screws

Iron
Steel
Copper
and
Brass
Screws

THE STEEL COMPANY OF CANADA LIMITED

HAMILTON MONTREAL

Finished
Bright
Polished
Blued
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Nickeled
Bronzed
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STAYBOLT TAPS



The Better the Man, the More He Appreciates Them—

Not only good when new, but heat treated and seasoned to maintain this goodness. Can be ground on face of cutting edge without affecting their size. That's why you'll find Pratt and Whitney Stay Bolt Taps on the job long after cheaper, "just as good" tools are buried in the scrap pile.

Threads accurately and cleanly cut, with the least expenditure of time and effort, are other reasons why these better Taps are favorites in the shop.

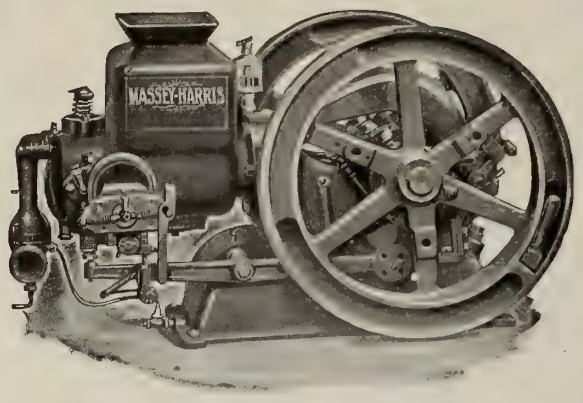
If you've used them before, you know just how good they are. If you haven't, send us your first order—we know you'll be back for more. They're carried in stock in our sales rooms in all large cities.

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PRATT AND WHITNEY

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An Engine You Can Depend On

The Massey-Harris Engine can be depended on to give all the year 'round service in any kind of weather at minimum cost, because it's designed on scientific principles and every part built to stand up and wear long.

Think what these features mean:

Simple in operation.

A Simple and Efficient Carburetor gives a perfect mixture in any kind of weather.

Effective Governor — No charge or spark on Idle Stroke.

Valves Easily Removable.

Large Water Space surrounding Cylinder.

Safe Gasoline Storage in the substantial Cast-Iron Base.

Write for more detailed description of the Massey-Harris Gasoline Engine.

Made in Sizes to deliver from 2 to 15 H.P.

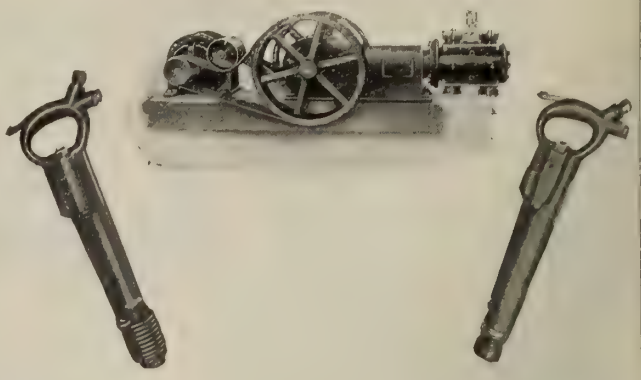
MASSEY-HARRIS CO., Limited

Head Office—Toronto, Canada

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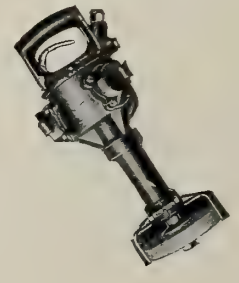
A Bigger Day's Work with the Aid of Air

WHEN your production costs are excessive the installation of a Canadian Ingersoll-Rand air compressor and a few "Little David" pneumatic tools will give you greater output and better quality without increasing your staff. For your foundry there are "Little Davids" for sand-ramming, chipping, grinding and hoisting and on the assembly floor "Little Davids" will speed up such operations as drilling, reaming, tapping, running down nuts, studs or screws, cleaning surfaces for painting and riveting.

The quality built into the Canadian Ingersoll-Rand products is the result of years of engineering experience and a perfect knowledge of the physical properties of the materials used. The result is a smooth running, even balanced equipment which requires a minimum amount of attention and repairs.

Bulletin number 8000 fully describes "Little David" pneumatic tools, K300-C covers small power driven Air Compressors and K301 will tell you about our straight line Steam Driven machines.

A postcard to our nearest branch will bring you any of this literature that may be of interest.





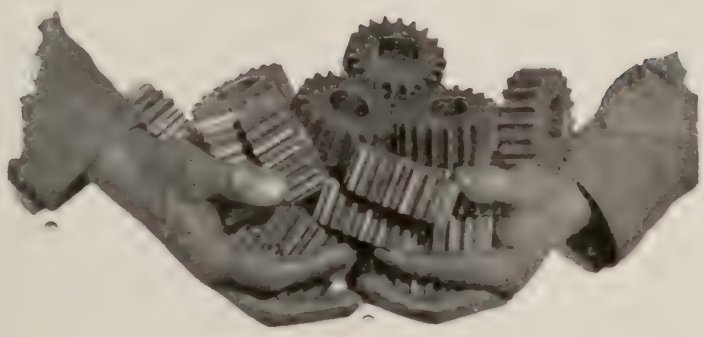
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Oldest, Largest and Most Reponsible Builders of Air Compressors and Compressed Air Equipment in the Empire

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Have been on the MARKET for 50 YEARS, and are still the STANDARD for QUALITY and DURABILITY

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TRADE MARK

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The Welland Vale Manufacturing Co., Limited

St. Catharines - Canada



An interesting description of this beautiful Persian Pottery will be found on the other side.
ROUS & MANN, LIMITED, Designers and Printers, 172 Simcoe St., Toronto, Canada

Reproductions of Persian Pottery

THE secret of glazing pottery without the introduction of lead was discovered in Persia during the 12th century. This made possible the obtaining of a wonderful blue color, greatly desired by the Persians, as they shared with the Egyptians and other Orientals the belief in the magical value of the blue as a protection against witchcraft.

Early in the 13th century, Jenghiz Khan, with clouds of Mongol horsemen, overran the greater part of Asia, killing and destroying as he went. The number of outstanding pieces of pottery saved in Persia was very small, but the extraordinary high standard of the pieces here reproduced is remarkable.

The large jar shown in the accompanying illustration is made with many handles, to hold the rope that fastened it to the donkey's back. The other pieces are probably food bowls and are amongst the choicest pieces in existence.

The ability to reproduce with ink as faithfully as is done on the reverse side of this sheet, the marvelous coloring and design of this pottery, is in its way almost as great an achievement as the original making of the pieces. It shows what can be done in the reproduction for commercial purposes of almost any article, no matter how intricate the design, or how unusual or delicate the color. Only an intimate knowledge of color printing and plate making, combined with a perfect mechanical equipment, can give these artistic and truthful results. These we place at your service.

ROUS & MANN, LIMITED

Designers and Printers

172 SIMCOE STREET - - TORONTO, CAN.

The pottery shown is from the Royal Ontario Museum)

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DEGRACO PAINTS
ALL COLORS FOR ALL PURPOSES

How Should Mill White Paint Be Selected?

The use of white paint —mill white—for plant interiors is the accepted standard method of painting among the majority of modern industrial plants.

The vital question of which mill white paint to use should be carefully considered from a standpoint of service and ultimate cost.

Good mill white paint tells its quality story year after year, not only during the first few months of service. Most any paint looks good for a time, but real worth is demonstrated by length of service. If paint falls down after a short period, its use represents loss regardless of the initial cost.

You eliminate the hazard of experiment—you combine sound business judgment and real economy when you buy **Sta-White,** the pure white oil paint for industrial interiors. Its demonstrated value has gained for it the leadership in the field of mill white paints.

Sta-White is the mill white paint that stays white. It is backed by satisfactory service records in every type of industry. Its use represents a safe investment in the long run.

Degraco Paints are sold through branch offices with warehouse stocks in all principal cities

Dominion Paint Works, Limited

Makers of
Degraco Paints, Varnishes, Enamels

WALKERVILLE - - - - CANADA

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Sta-White— *a pure white, light-reflecting oil paint for industrial interiors. It stays white. The mill white you can rely upon.*



Superior Graphite Paint—*a protective coating for structural steel, bridges, metal roofs, stacks and all metal surfaces.*



Degraco Paints, Varnishes and Enamels *are made in all colours for interiors and exteriors, for every service requirement.*



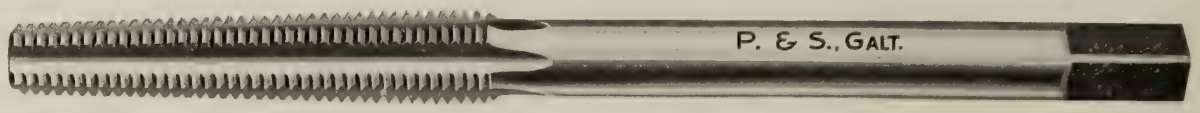
Degraco Brick and Concrete Paints—*for interiors and exteriors. Concrete Walls. Floor Paint, Floor Hardener, Damp-proofing.*

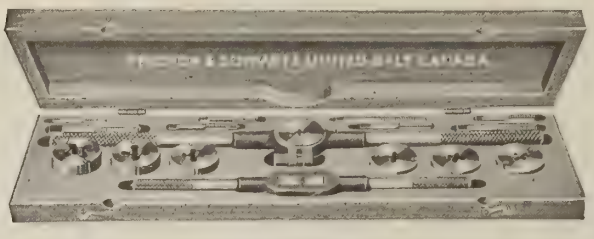


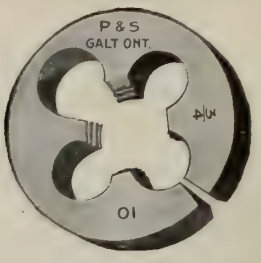
Degraco-Tone—*an oil paint in flat finish for interior use on plaster walls, woodwork, wall board, concrete, tile, metal ceilings.*

DEGRACO

Paints - Varnishes - Enamels







Manufacturers of

Taps, Dies, Screw Plates, Drill Press Sleeves
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in

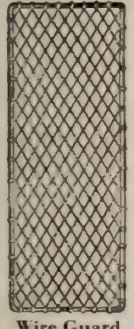
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The Manitoba Rolling Mill Co., Limited

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Steel, Iron and Metal Merchants

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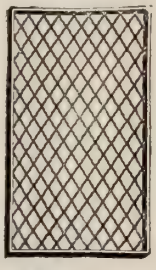


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Round Iron Frame

CLOSE UP THE WINDOWS AND MAKE MORE MONEY

Just at the present moment there is a campaign on against the robber. Everywhere owners of factories, stores, etc, are putting up guards to keep out the thief.

DENNIS WIRE WINDOW GUARDS
are greatly in demand.



Wire Guard
Channel Iron Frame

There isn't a hardwareman who can't take an order for us for these guards for buildings in his district.
There is good profit for you if you act as our agent.
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We also make

Wire Elevator Enclosures, Machinery Guards.
Steel Lockers, Steel Cabinets, Steel Shelving, Etc.
Commercial Wirework of all Kinds.
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"Boca" Solid Steel Sash.
Steel Lavatory Compartments.

Write for folders

THE DENNIS WIRE AND IRON WORKS CO. LIMITED
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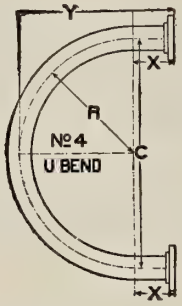
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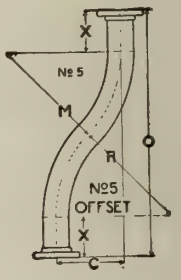


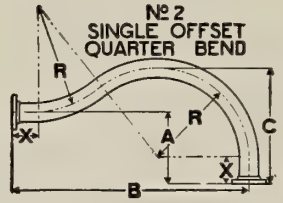
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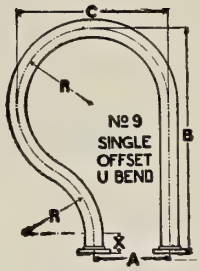
PIPE BENDS

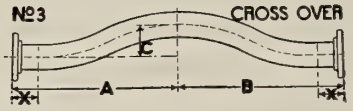
ARE THE STANDARD

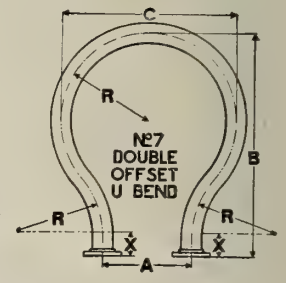


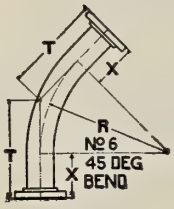


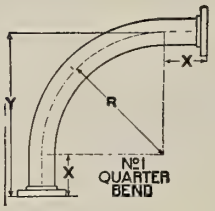












Manufacturers of Valves, Fittings and Piping Equipment and Distributors of Pipe, Plumbing and Heating Supplies.

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HEAD OFFICE & WORKS
1280 ST. PATRICK STREET
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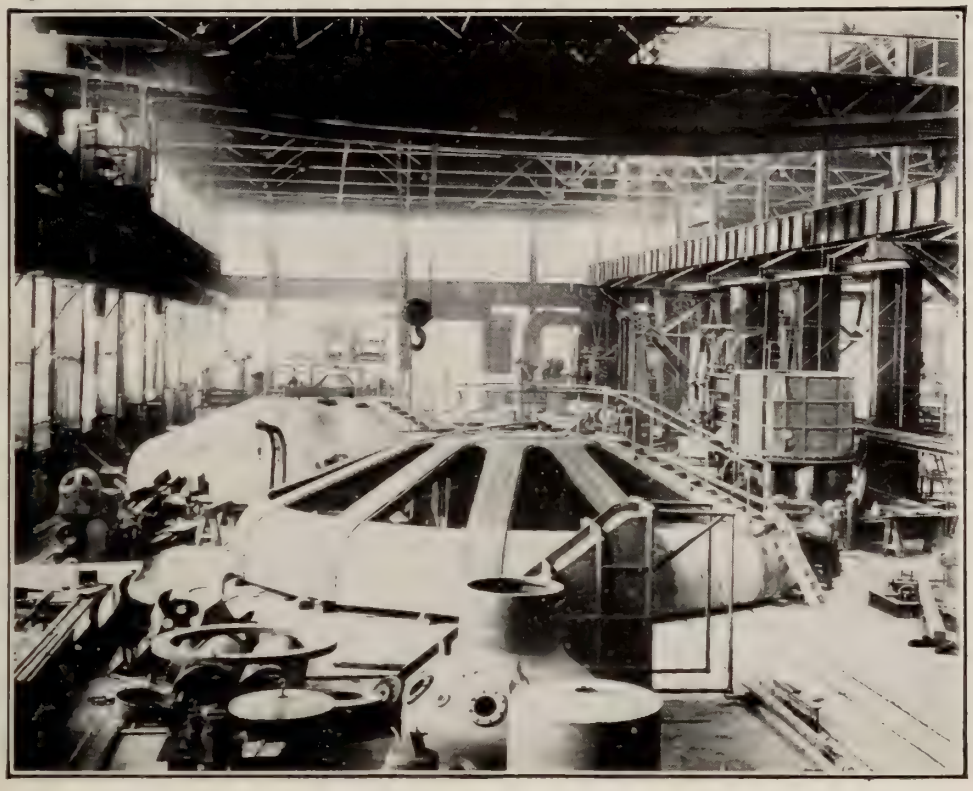
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Sales Offices:
MANCHESTER, BIRMINGHAM, LEEDS, GLASGOW.

42



Shop Assembly, Thrust Bearing Supports, 10,800 H.P. Turbines

I. P. MORRIS HYDRAULIC TURBINE SERVICE

We design and build Paper Machines of all modern types, including Fourdriniers for Fine Papers, Fast-running News-Print Machines, Harper, Cylinder and Wet Machines.

Millspaugh Suction Rolls, Stock Pumps, Fan or Plunger types, Pope Paper Reels, Spangenberg Screens, Granite Press Rolls, etc.

Existing Paper Machines rebuilt on modern lines.

Calender Rolls and Press Rolls re-ground promptly and accurately

means much to users of water-power. It assures them of such important features as

1. **Continuous operation over extremely long periods, with a minimum of repairs.**
2. **Maximum efficiency over an unusually wide range of power, with high specific speed.**
3. **The benefit of recent important improvements such as**
   The Moody Spreading Draft Tube,
   The Taylor Governor Control System,
   The Taylor Pneumatic Lubricating System and other advances in Turbine Unit Design.

Over 1,000,000 H.P. in I. P. Morris Turbines have been installed or are under construction in Canada to date.

Information promptly furnished on application.

DOMINION ENGINEERING WORKS, Limited

Phone: Melrose 700

MONTREAL, CANADA

Cable Address: "Domworks, Montreal"

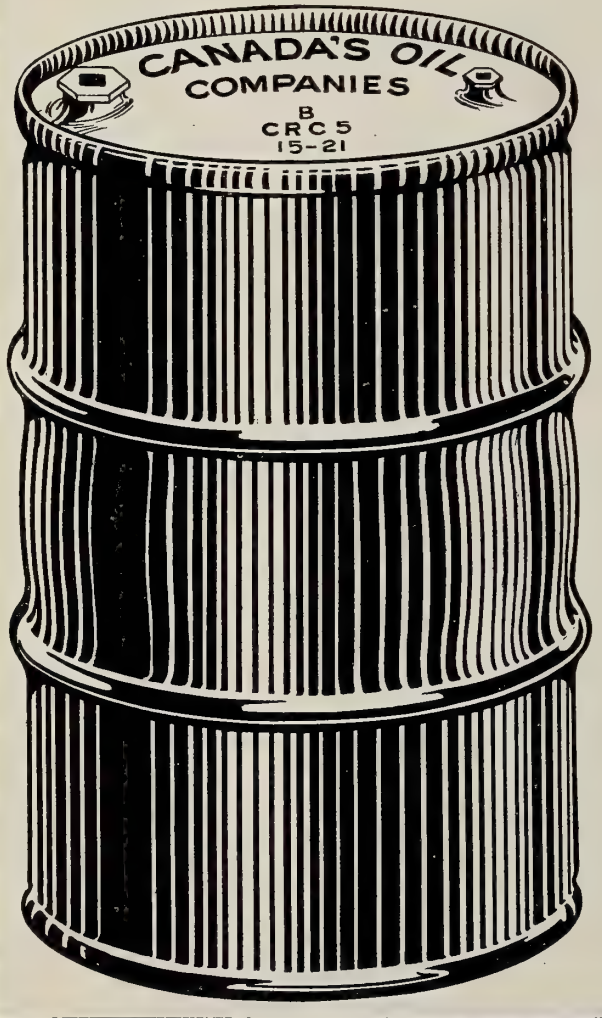
R. F. MATHER, Western Representative, London Building, Vancouver, B. C.

(M-41)

Beath WELDED STEEL Barrels

Stir Up Repeat Business

If you want your good product to act as "travelling salesman" for repeat orders you will ship it in Beath-Welded Steel-Barrels. Not only do they give a wonderful impression of up-to-date enterprise but they deliver the product —every ounce or drop of it—in a manner highly pleasing to your customer.



Beath-welded Steel-Barrels are high-grade steel construction with every seam **welded** and then the whole barrel galvanized seams and all, rendering the barrel absolutely leak-proof and rust-proof.

Economy. Size for size wood barrels are heavy and cumbersome when compared with Beath-Welded Steel-barrels, which can be stored outside and used over and over again. No losses from leakage or breaking open; easily filled—and the self-draining, raised and curved tap-outlets save the last drop of liquid.

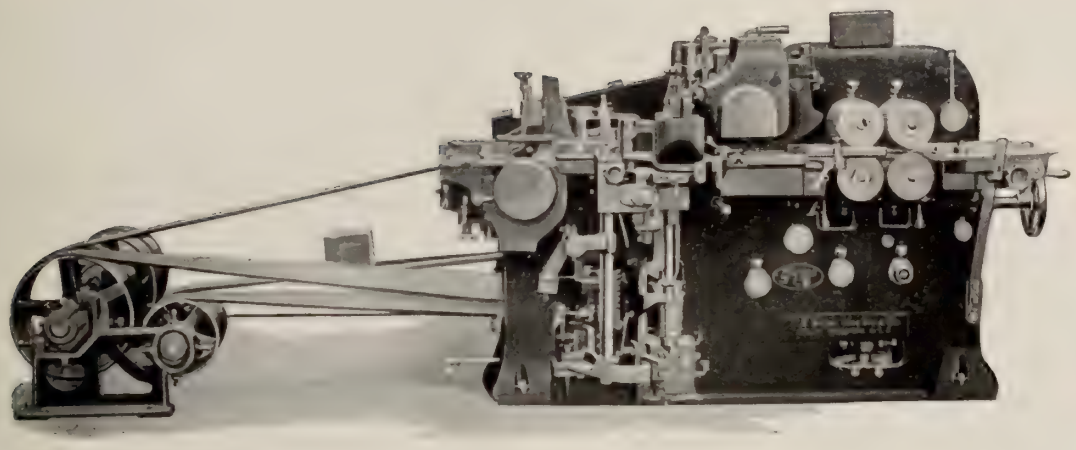
All sizes for every use—for liquids, oils, paints, varnish, gasoline—everything. 78 standard sizes and weights of barrels.

Beath-Welded Steel-Barrels are so widely used that their price compares favorably with ordinary wood barrels—and they are cheapest in the end. Write for full particulars and quotations.

We also make Oil pumps, Grease Pumps, Standard Barrel Trucks, Wagon Tanks, Truck Tanks, Delivery Cans, Underground Storage Tanks, Standard Reversible Faucets.

W. D. Beath & Son
Limited
394 Symington Ave.
Toronto :: Ontario

Yates



The machine shown above is one of our Type "C" Moulders, a Moulder that was designed to turn out the smaller size mouldings at high speed, and still retain that fine finish which is necessary on this class of work. They are entirely open side which allows you to make quick changes and adjustments. Side Head Spindles are mounted in heavy yokes and are adjustable vertically and laterally. All heads are of the Slip-on type. Rates of feed from 25 to 100 feet per minute. Made in two sizes—"C3" 4″x4″ and "C4" 4″x8″. If you would like to know more about these machines, write us, we'll gladly send you circular or any other data you may desire.

P. B. Yates Machine Co. Ltd.

HAMILTON - Canada

YATES

The Invariable Choice of the Man Who Knows

Of these eight widely used commercial metals-



Acids destroy

COPPER ZINC ALUMINUM



Rust corrodes

IRON STEEL



Heat weakens

LEAD



Steam wears & salt water pits BRONZE



Monel alone stands up against the many destructive forces that quickly break down the resistance of most commercial service metals. Because it is strong as steel, more corrosion-resisting than copper, more wear-resisting than bronze, an increasing number of manufacturers are using MONEL metal for products for the most exacting and difficult industrial service, as well as for the most common domestic uses.

The name Monel identifies the natural nickel alloy—67% nickel, 28% copper and 5% other metals — produced by The International Nickel Company.

The International Nickel Company of Canada, Limited

Harbor Commission Building - Toronto, Ont.

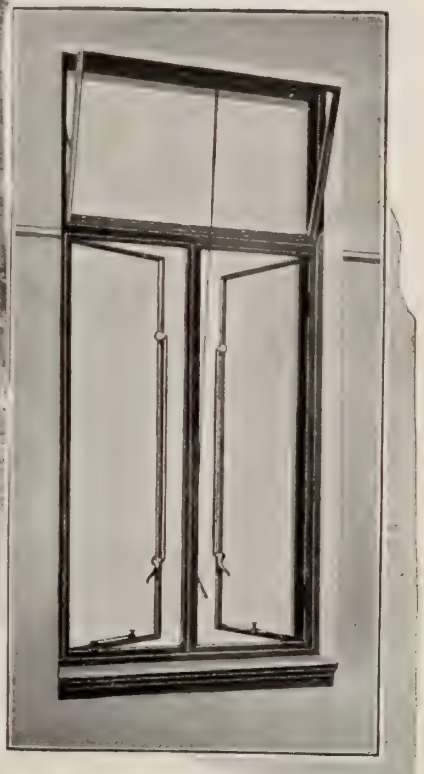
INCo Monel metal

THE INTERNATIONAL NICKEL COMPANY

Crittall CASEMENTS



FOY BUILDING, TORONTO
Curry & Sparling, Arch.



Better Windows at Lower Cost

THE Foy Building, in Toronto, typifies the many advantages Crittall *Universal* Casements give to office buildings. Besides adding an air of refinement and distinction, these modern windows are also more lasting and more convenient. They will not warp, rattle or sag. They admit more light. They harmonize with any architectural design. In every way, these fine metal casements are ideal for the better class of office buildings. Yet the original cost is practically the same as wooden sash. And their durability makes them cost much less in the end.

Pictures of installations, blue-prints, etc., sent on request. A staff of competent engineers always ready to discuss window problems with you.

Why Crittall Casements?

1. Because they are available in standard sizes.
2. Because they are readily adaptable to windows of any practical dimensions.
3. Because of their simplicity, perfect double weathering, scientific design, practical ventilation.

CANADIAN METAL WINDOW & STEEL PRODUCTS LIMITED

OFFICE AND FACTORY—160 RIVER ST., TORONTO

MONTREAL OFFICE—169 PEEL STREET

AGENCIES: R. R. Power, Metropole Building, HALIFAX, N.S.; R. N. M. Robertson, P.O. Box 1053, ST. JOHN, N.B.; W. J. Banks, St. John Street, QUEBEC, P.Q.; R. Y. Kilvert & Co., 402 Builders Exchange, WINNIPEG, Man.; A. L. Charlebois, Ave. J. & 20th Street, SASKATOON, Sask.; Gorman's Limited, EDMONTON, Alta., CALGARY, Alta., VANCOUVER, B.C.

CRITTALL INTENTO 50 UNIVERSAL

CANADIAN FURNACE CO.

LIMITED

PORT COLBORNE, ONT.

Manufacturers of Pig Iron

BRAND "VICTORIA"

"VICTORIA" FOUNDRY IRON

Strong—Soft—Neutral

"VICTORIA" MALLEABLE IRON

Furnished to all Standard Analyses

SOLE SALES AGENTS:

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Cleveland, Ohio

BUFFALO, N.Y. PITTSBURG, PA. DETROIT, MICH.

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"MEAD-MORRISON"

STEAM HOISTS
GRAB BUCKETS
DERRICKS & IRONS
ELECTRIC HOISTS

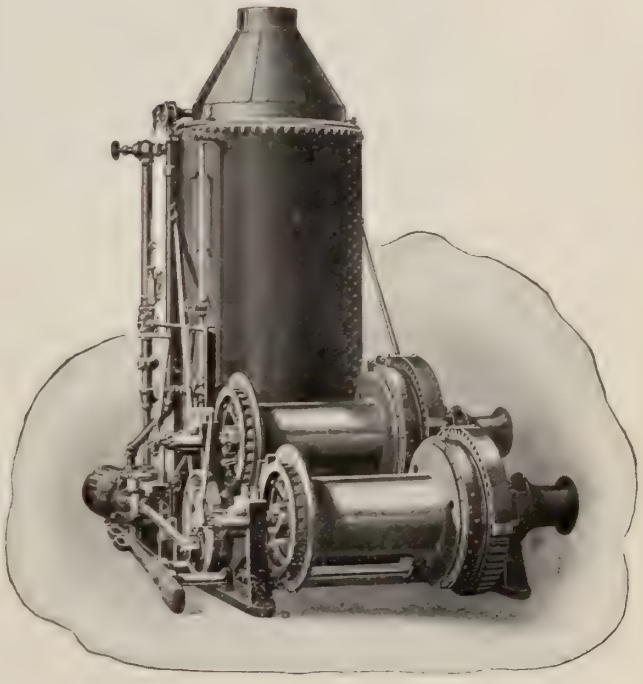
Engineers - Manufacturers - Contractors



GRAB BUCKETS

"Williams" Design

ALL STYLES AND SIZES
FOR ALL PURPOSES



STEAM HOISTS

CUT TEETH

BRONZE BUSHED DRUMS

FRICTIONS—
double cone and self adjusting

Following Sizes Built and Kept in Stock:

7x10---9x10---10x12

Agents:—

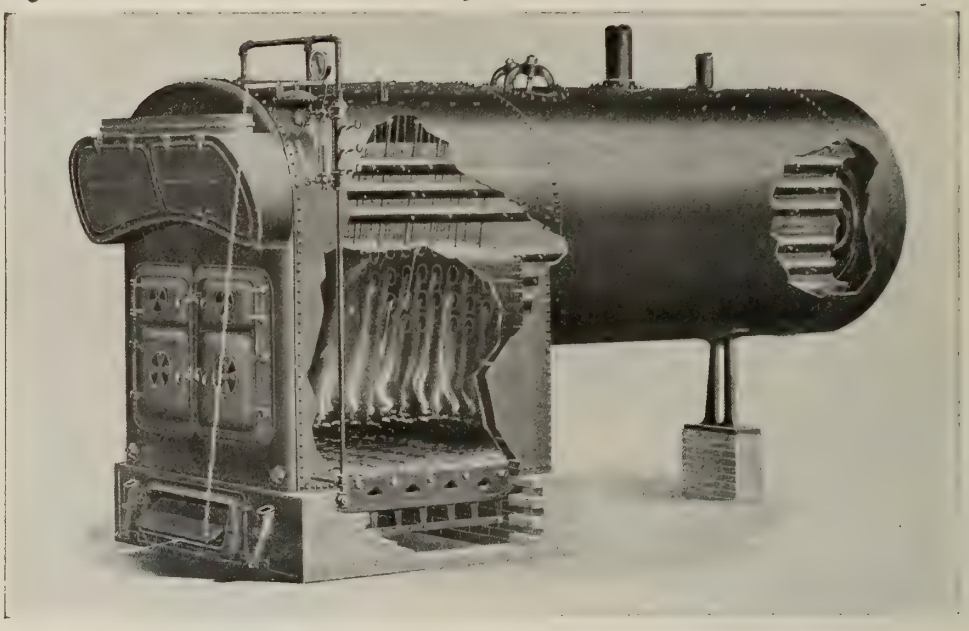
KELLY POWELL, - Winnipeg
HARVARD, TURNBULL, - Toronto
ROBERT HAMILTON, - Vancouver
FERGUSON & PALMER, London, Eng.

Manufactured in Canada by

CANADIAN MEAD-MORRISON CO
LIMITED
285 BEAVER HALL HILL
MONTREAL
WORKS: WELLAND ONT.

BOILERS

OF ALL KINDS



"Inglis" Portable Firebox Heating Boiler

We also make Tanks, Stacks, Water Towers, Steel Plate Work, Engines and Pumping Machinery

For over sixty (60) years we have been leaders in our lines.

We can guarantee prompt delivery.

Send for Catalog, prices, etc.

The JOHN INGLIS COMPANY, Limited

14 STRACHAN AVE., TORONTO, CANADA

Eastern Representatives—JAS. W. PYKE & CO., LIMITED, 232 St. James St., Montreal

Ottawa Representative—J. W. ANDERSON, 7 Bank Street Chambers

Perkins Vegetable Glue

The Glue of No Regrets



This Picture is the Home of

PERKINS
183

Trade Mark
(Reg. U. S. Patent Office)

OUR CANADA FACTORY IS LOCATED AT HAMILTON, ONTARIO

Process and Product Patents covering Perkins Glue were granted July 2nd and March 19th, 1912, and have been held valid and infringed by the United States Circuit Court of Appeals. Patents have also been granted in Canada, Great Britain, Germany, France, Belgium, Italy and other foreign countries.

PERKINS GLUE COMPANY

Factory and General Offices:
Lansdale, Pennsylvania

Sales Office:
South Bend, Indiana



Give a receipt
and get all your money

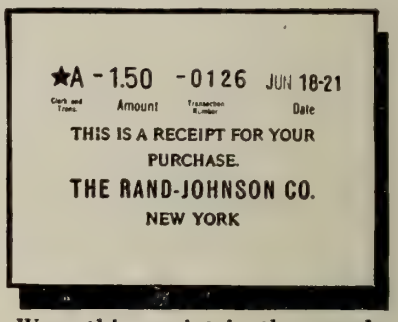
The right way to handle a sale

1. Collect the goods at the wrapping counter beside the register.
2. Tell the customer the price and get the money.
3. Register the sale.
4. Wrap the receipt in the parcel.
5. Give parcel and change to the customer.

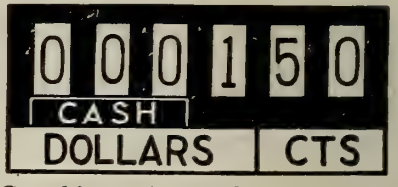
The customer gets quick service.

The clerk gets credit for making the sale.

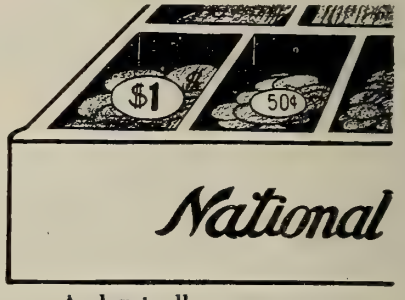
The merchant gets all of his profits.



Wrap this receipt in the parcel



Get this receipt inside the register



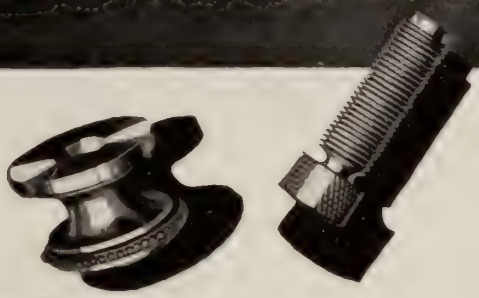
And get all your money

We make cash registers for every line of business

NATIONAL
CASH REGISTER COMPANY
OF CANADA LIMITED — TORONTO ONTARIO

Namco Parts
For Auto Accessories







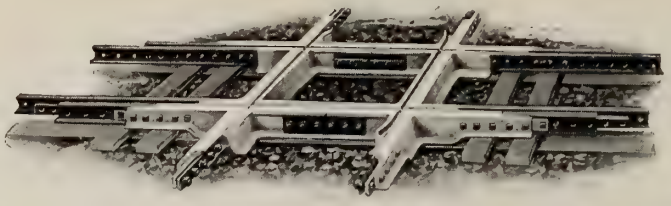
It makes no difference whether you need one thousand tiny Adjusting Screws—Ten thousand Hardened and Ground Spring Bolts or any other milled parts up to 2¼ in. diam. Our well-equipped product plant is at your service.

Extensive knowledge of special operations, and a mechanical equipment for practically every variety, enables us to take care of new and highly specialized products without the loss of time caused by slower methods, or the cost of experimenting to find quicker ones.

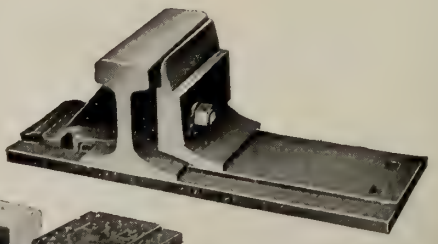
Standard Cap and Set Screws and Studs, also plain and castellated Nuts from stock.

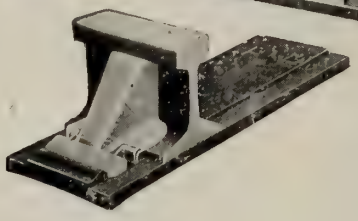


The National Acme Company
Montreal, P. Q.

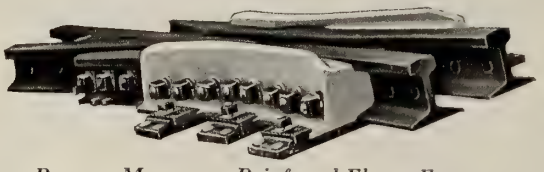


Ramapo Manganese Girder Type Crossing





Ramapo Double Shoulder Solid Bottom Switch Riser Plate



Ramapo Manganese Reinforced Flange Frog



Ramapo Wedge Adjustment Guard Rail Clamp

Ramapo Products



Ramapo Automatic Safety Switch Stands are made in Four styles for main line and yard installatian. Style No. 17 for main line use is illustrated.

Ramapo patented specialties in railroad track accessories have been used for many years by the Important railroads in Canada and the United States, and in many foreign countries—China, Japan, Russia, South Africa, South America. Their Superiority in design is recognized by official and roadmaster. They stand for efficiency and long life.

We solicit inquiries for particular information or plans pertaining to manganese reinforced construction and regular built-up work for street or steam railroads.

Prompt deliveries can be made of all our regular lines of manufacture, which include switches, frogs and crossings in both heavy and light equipment; Ramapo automatic safety switch stands and automatic return switch stands; rigid switch stands; solid bottom switch riser plates; adjustable rail braces; guard rail clamps, etc.

Particular attention is called to the Ramapo Automatic Safety Switch Stands. By reason of their exclusive automatic features the human element is eliminated. When a switch is run through accidentally the stand operates automatically whether or not it is locked. The operation by hand lever is simple and positive.

Descriptive catalogue furnished upon request

Canadian Ramapo Iron Works, Ltd.
NIAGARA FALLS, ONT.

Superior Catalogues Increase Sales



To secure best results, Paper is the first important item.
For all high grade half-tone and color
printing specify to your printer

Maple Leaf or Beaver Coated Book Papers

Made by

PROVINCIAL PAPER MILLS LIMITED

Head Office: 54-56 University Ave.
TORONTO

Mills at: Mille Roches, Thorold, Georgetown
and Port Arthur, Ontario.



Many Canadian Manufacturers recognize the above picture as their Printing Service Centre. Situated at the corner of Richmond and Sheppard Streets, Toronto, it is the hub of the business section of the city, equipped with one of the most complete and up-to-date plants in Canada.

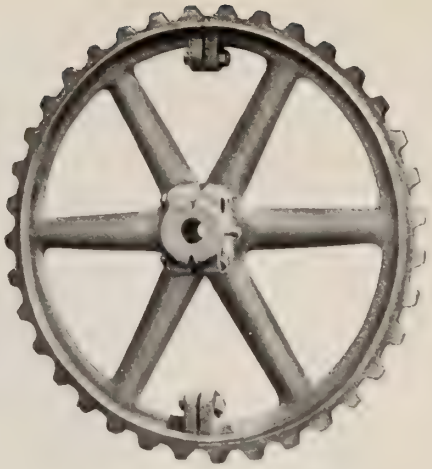
SATURDAY NIGHT PRESS

Is a complete organization, capable of handling your Catalogue, Direct-by-mail Folders, Advertising Literature, Booklets or Circulars, from the original idea to the prospect's desk. It would be profitable to you and a pleasure to us to demonstrate the excellence of our Printing Service.

TELEPHONE FOR ALL DEPARTMENTS - - MAIN 6640







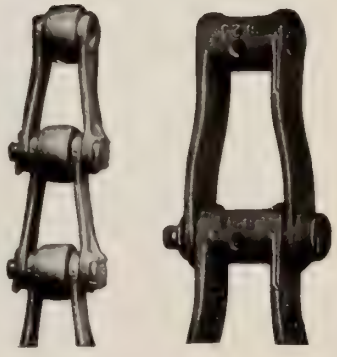
LINK-BELT CONVEYOR ACCESSORIES

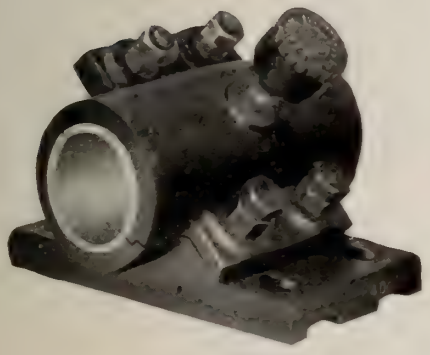


Insure the continuous working of your Elevating, Conveying and Power Transmission Machinery, by keeping spare parts constantly on hand.

Be prepared for increased business by having all your equipment up to its most efficient working order.

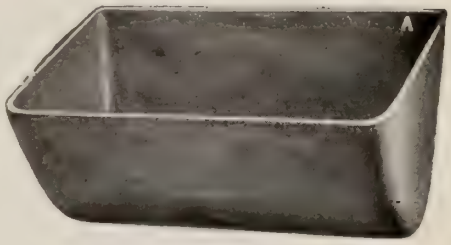
Replace that bucket or chain now—make that extension to your plant that you have been thinking about—now!



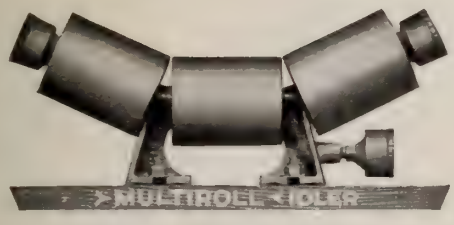


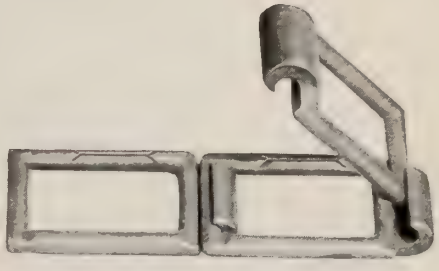
CANADIAN
LINK-BELT CO., LTD.
TORONTO MONTREAL

850



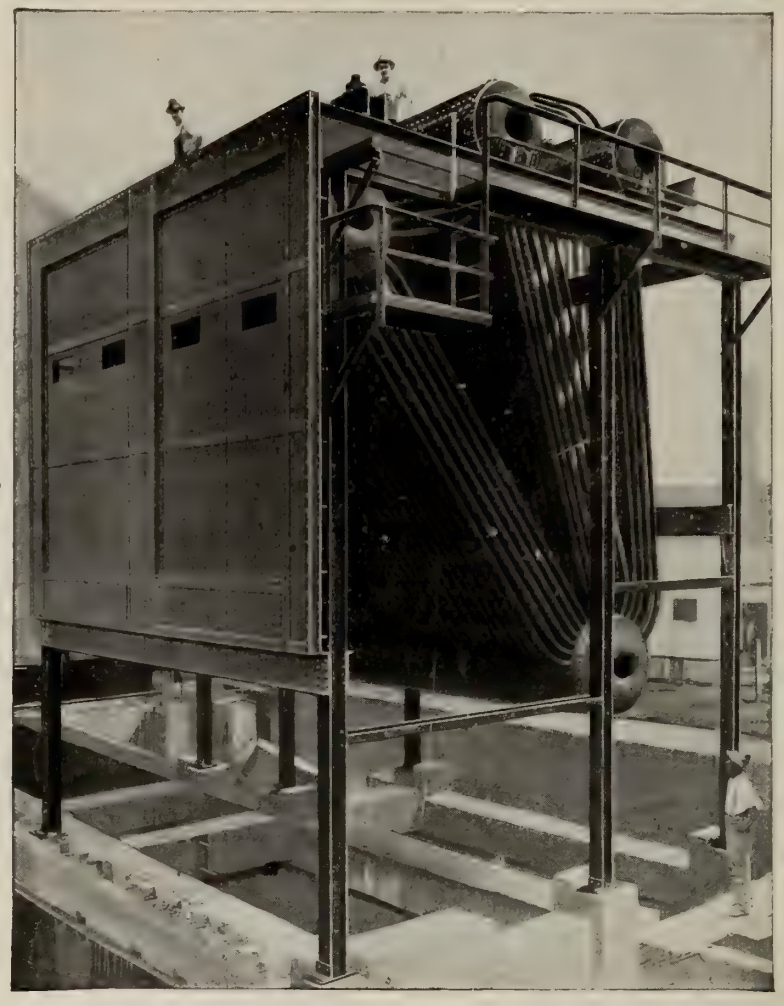






LINK-BELT

86th Year



86th Year

Connelly Water Tube Boilers

are of the 4 drum type, have 100% tube area in the path of circulation and deliver steam superheated from 5 to 10 degrees Fahrenheit.
Simple in design, no flat surfaces, no staybolts, no crown bars, no braces, no hand-holes, free from joints.
All parts easily accessible for cleaning, both internally and externally.
Can be built in units from 200 H.P. up to 4,000 H.P. and for working pressures up to 300 lbs. per sq. in. Over 150,000 H.P. in successful operation.

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Head Office and Works: LONDON. Canada

Branches:
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62 Water Street, St. John, N. B.

Agents:
The Arthur S. Leitch Co., Ltd., 1001-1002 Kent Bldg., Toronto, Ont.
Wm. W. Hicks, 567 Banning Street, Winnipeg, Man.
George Stewart, 5 Lineham Block, Calgary, Alta.
Vancouver Machinery Depot Ltd., Vancouver, B.C.
Thos. A. Pippy, Waldegrave Street, St. John's, Nfld.

ESTABLISHED 1834

LEONARD

1855 - 1922

Sixty-Seven Years Development

OF

TAYLOR SAFES

J. & J. Taylor began business in a modest way in 1855, with the aim of producing a safe that would assure absolute protection against fire. For sixty-seven years, we have concentrated on this idea, and to-day the man who uses a Taylor Safe has the highest achievement in impregnable security for his valuables.

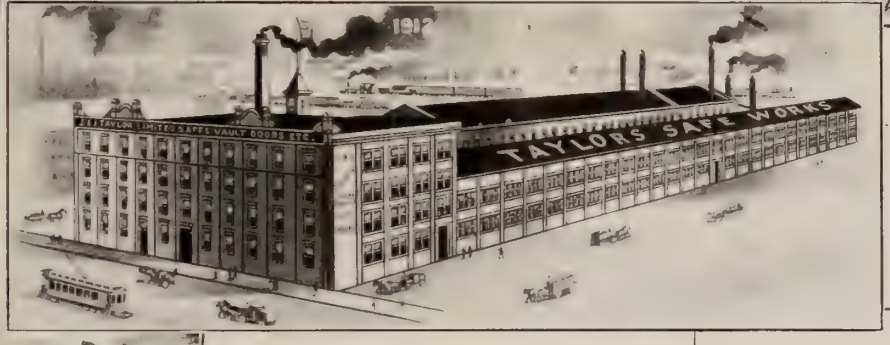
The present extensive plant of the Taylor Safe Works is testimony of the success which has crowned our efforts, and no firm or individual doing business in Canada, should be without the protection for valuable papers that a Taylor Safe provides.

Made in 40 sizes
all one quality



EVIDENCE OF OUR STEADY GROWTH FOR OVER HALF A CENTURY







J. & J. TAYLOR
LIMITED

Toronto Safe Works
TORONTO

Branches at
Montreal, Winnipeg, Vancouver

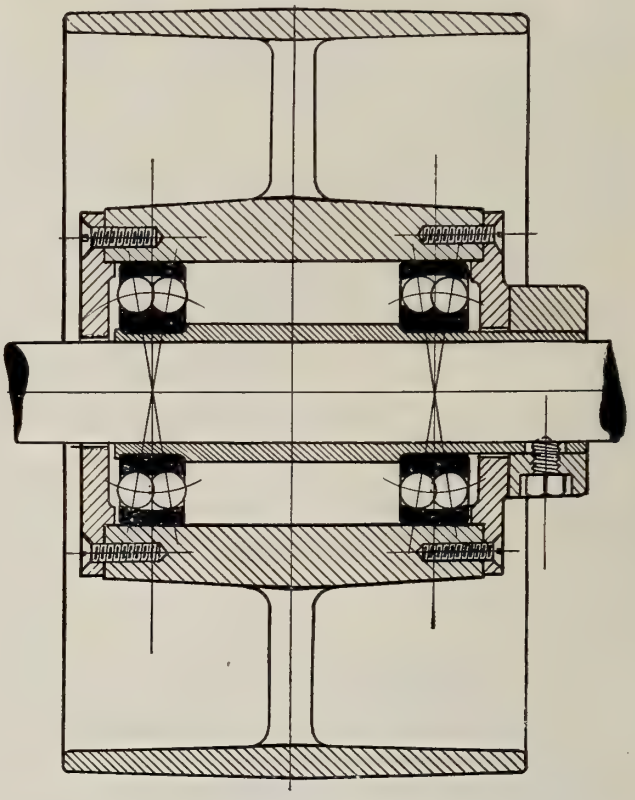


SKF

ANTI-FRICTION TRANSMISSION

BALL BEARING LOOSE PULLEYS

SIMPLE CONSTRUCTION ★ ★ PATENTED



ACCURATE DESIGN AND BALANCE

AN ASSURED REMEDY FOR BEARING TROUBLES IN LOOSE PULLEYS

GUARANTEED TO WITHSTAND ANY LOAD AT ANY SPEED CAPABLE OF BEING TRANSMITTED TO THEM

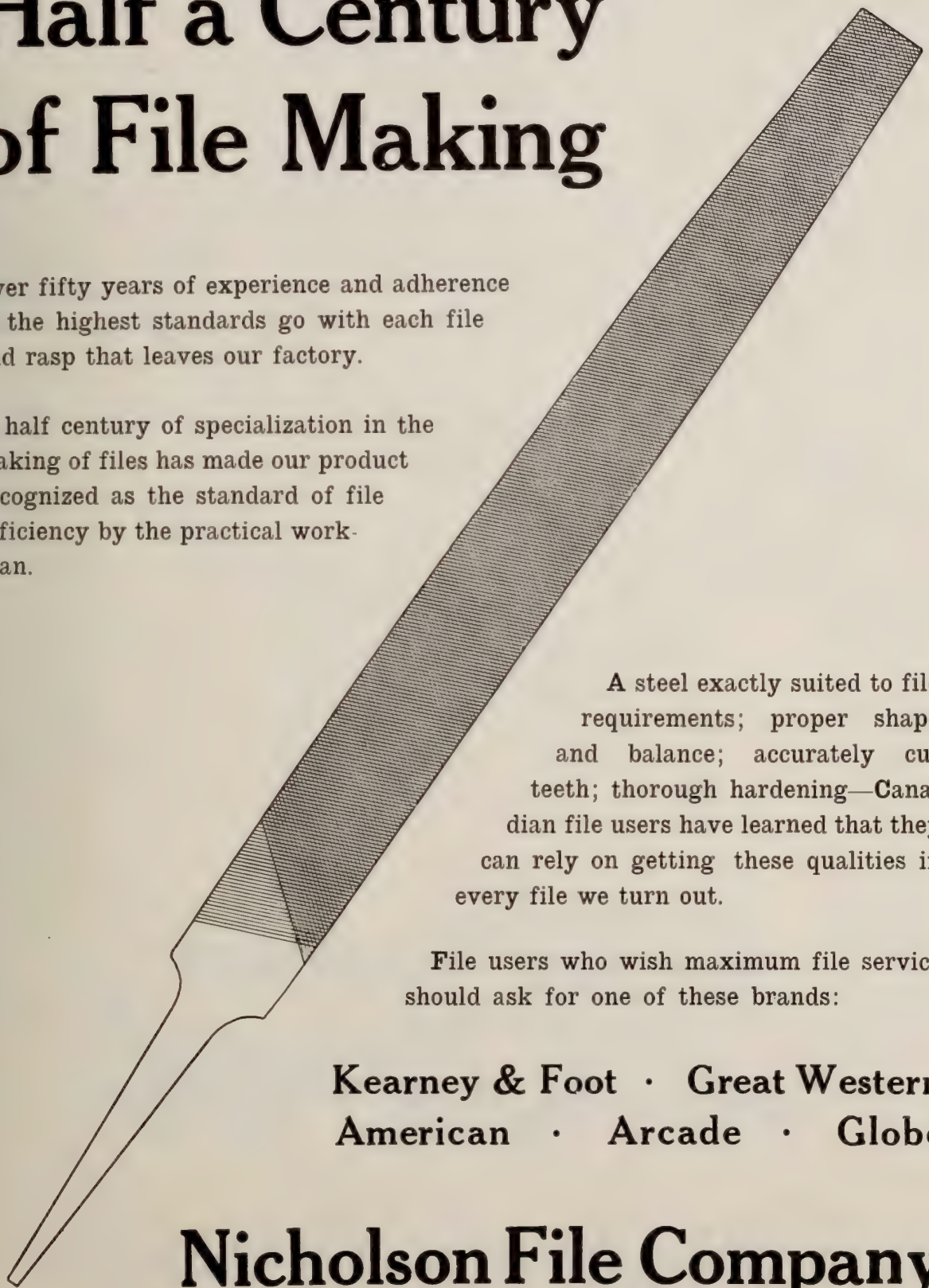
THESE PULLEYS ARE NOW IN CONSTANT USE, DAY AND NIGHT IN BIG MANUFACTURING PLANTS WHERE HIGH SPEED AND HARD USAGE HAVE CAUSED THE FAILURE OF ALL OTHER TYPES OF PULLEYS.

EQUIP THAT TROUBLESOME DRIVE NOW

Canadian SKF Company, Limited

TORONTO - - - MONTREAL

Half a Century of File Making



Over fifty years of experience and adherence to the highest standards go with each file and rasp that leaves our factory.

A half century of specialization in the making of files has made our product recognized as the standard of file efficiency by the practical workman.

A steel exactly suited to file requirements; proper shape and balance; accurately cut teeth; thorough hardening—Canadian file users have learned that they can rely on getting these qualities in every file we turn out.

File users who wish maximum file service should ask for one of these brands:

Kearney & Foot · Great Western
American · Arcade · Globe

Nicholson File Company

PORT HOPE · ONTARIO

For Every Transportation Need —

Ford

Cars and Trucks

Ford Motor Company of Canada, Limited, Ford, Ontario


THE AUSTIN LINE
AUSTIN
MACHINERY
"MOVES THE EARTH—
MIXES THE CONCRETE
TRADE MARK
ANNOUNCEMENT
THE AUSTIN MACHINERY CORPORATION
announces that the
Canadian Austin Machinery, Limited
Woodstock, Ontario
incorporated under the laws of Canada, will henceforth act as sole manufacturers and distributors in Canada of the complete Austin Line of earth-moving and concrete-mixing equipment.
The manufacture of Austin Machinery at Woodstock, Ontario, enables the CANADIAN AUSTIN MACHINERY, LIMITED, to supply this broad line of Contractors' requirements for construction, good road making, reclamation, excavation and irrigation promptly, and to furnish service in maintenance.
AUSTIN MACHINERY CORPORATION
Chicago New York New Orleans San Francisco Omaha Portland
Houston Muskegon Toledo Fairmont, W. Va Los Angeles
Minneapolis Pittsburgh Detroit
Capitalization: $15,000,000 Preferred Stock
200,000 Shares Common Stock
BERT A. LINDERMAN, - President
JOHN ROSS SHAW, - Vice President
DIRECTORS
RALPH CREWS
Director, National City Co.
New York
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President, Linderman Steel & Machine Co.
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DIRECTORS
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Formerly Vice President, National City Bank
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CLAY H. HOLLISTER
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DIRECTORS
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Vice President, Canadian Linderman Co., Limited
Woodstock, Ont.
HON. SENATOR CLARENCE WATSON
President, Consolidation Coal Co.
New York
THE AUSTIN LINE

TRADE NORTON MARK

Alundum

Crystolon

If you need a grinding wheel for fast cutting or fine finish and for minimum total grinding expense, use **Norton Alundum and Norton Crystolon grinding wheels.**

If it is for grinding hard, soft, high speed, manganese or any alloy steel, **Norton Alundum wheels** properly selected for abrasive, grit and grade, will give you absolute satisfaction.

If it is for grinding cast iron, brass, aluminum, or any low tensile strength material, **Norton Crystolon wheels** will give you just the service you want.

If you polish with set-up wheels, **Norton Alundum polishing grain** will give you more pieces per set-up, and more pieces production per hour.

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Name any particular subject you are interested in, return the clipping below and we will be pleased to forward booklets and information describing your problem fully.

Kindly send me booklets and full information:

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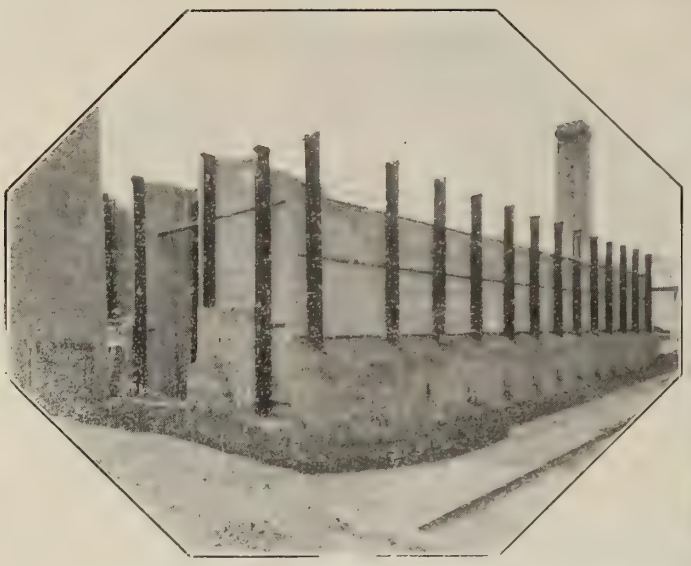
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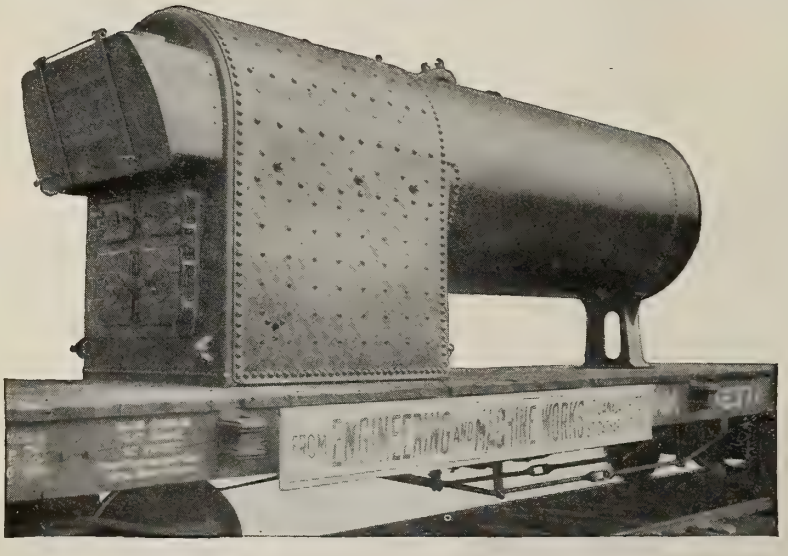
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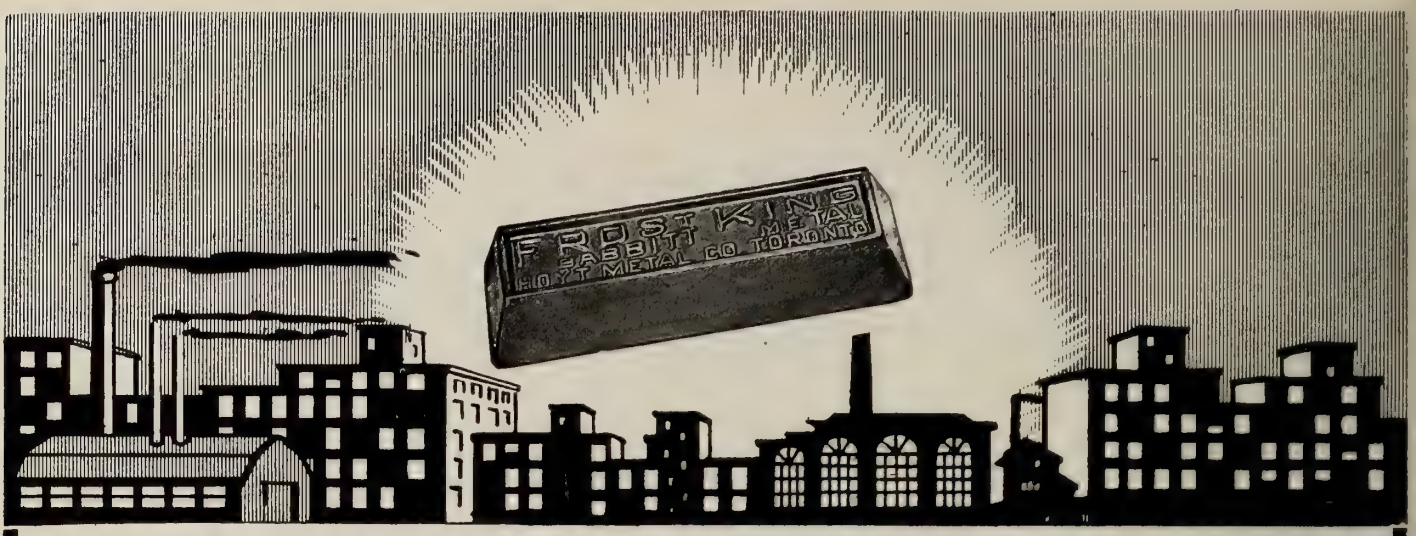
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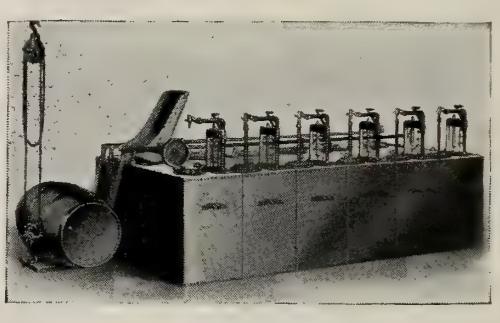
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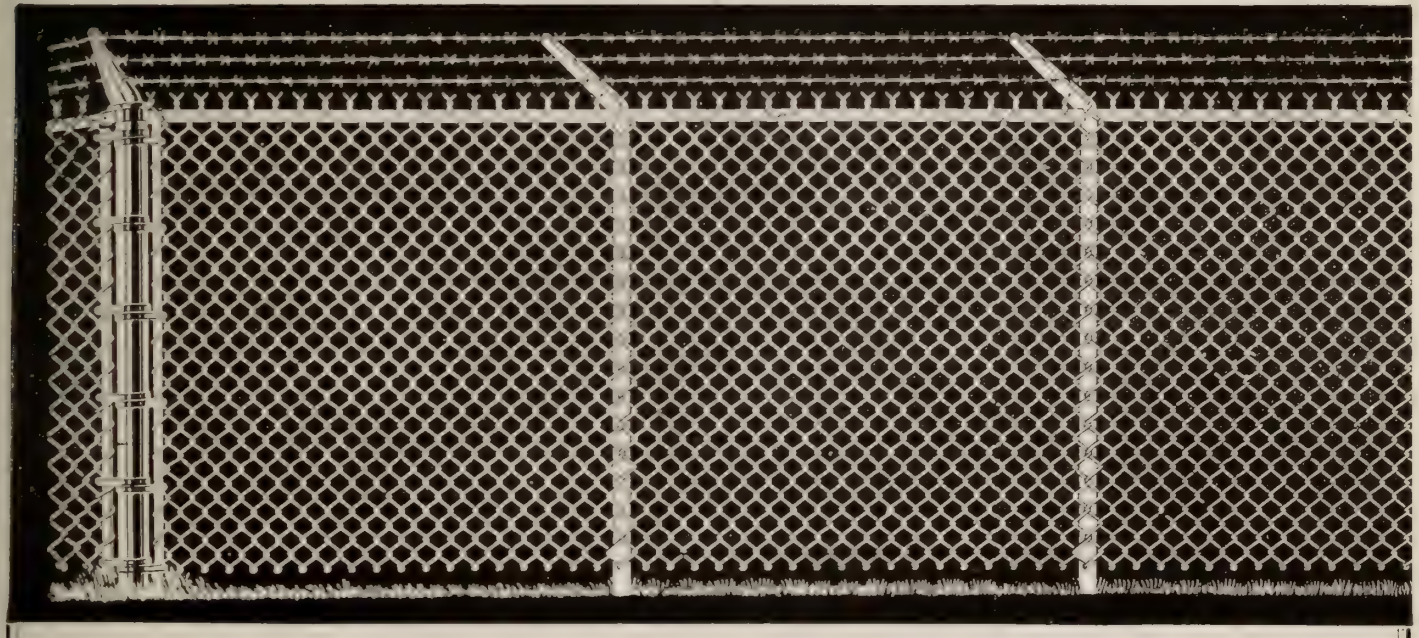
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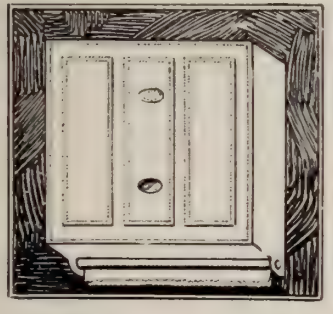
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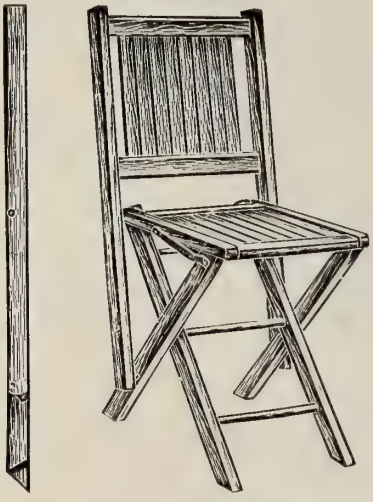
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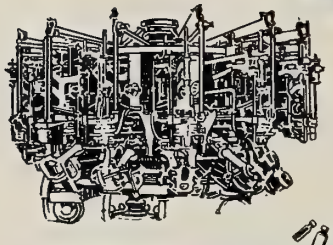
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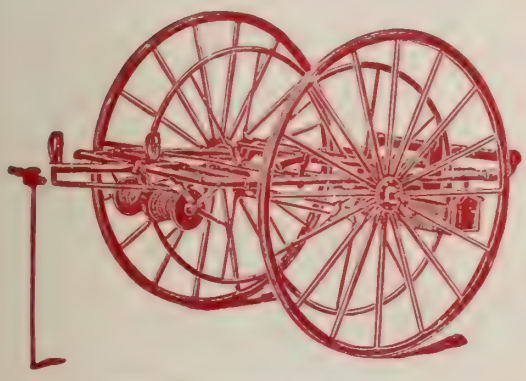
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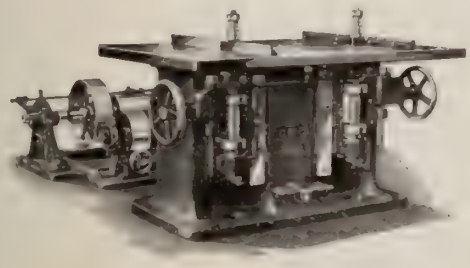
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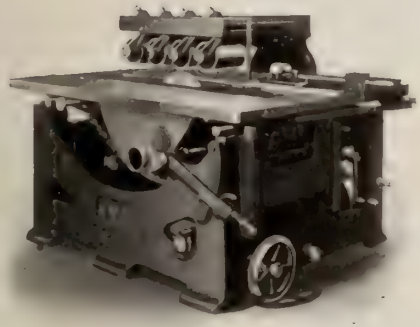
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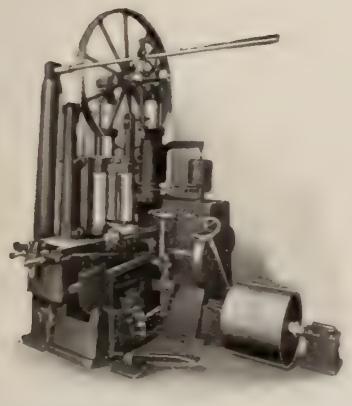
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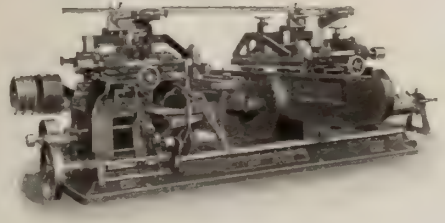
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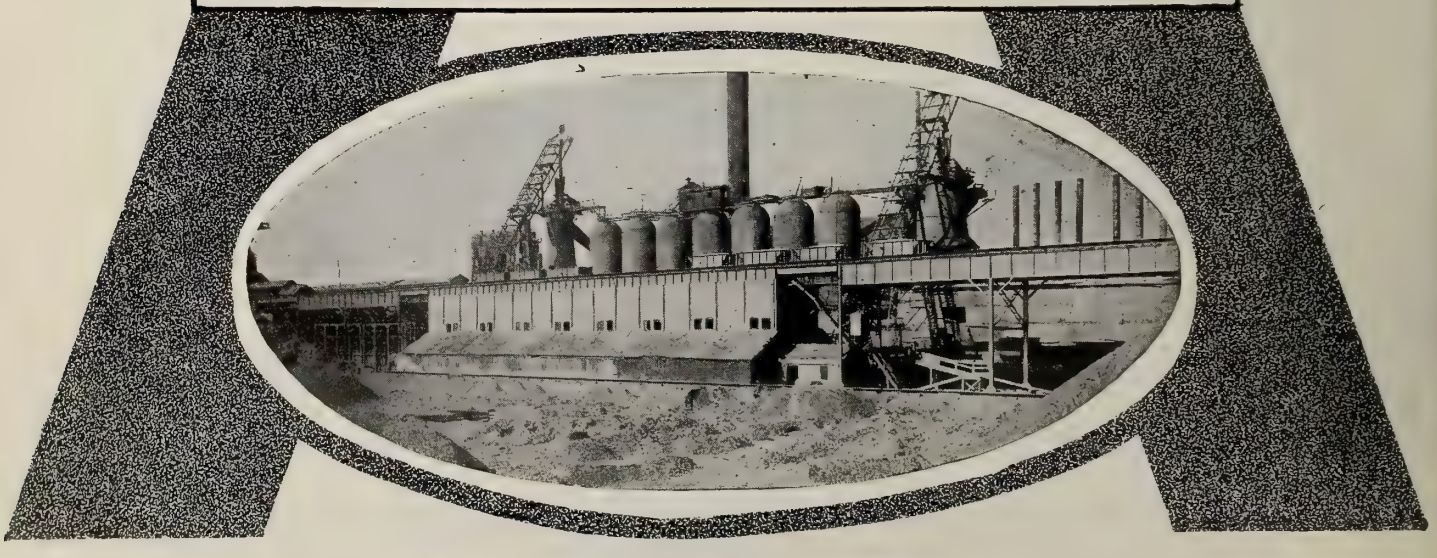
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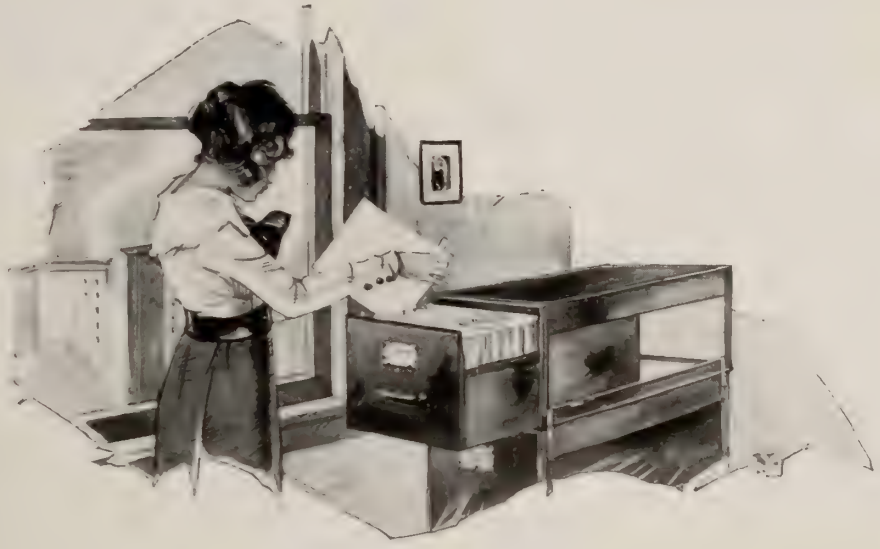
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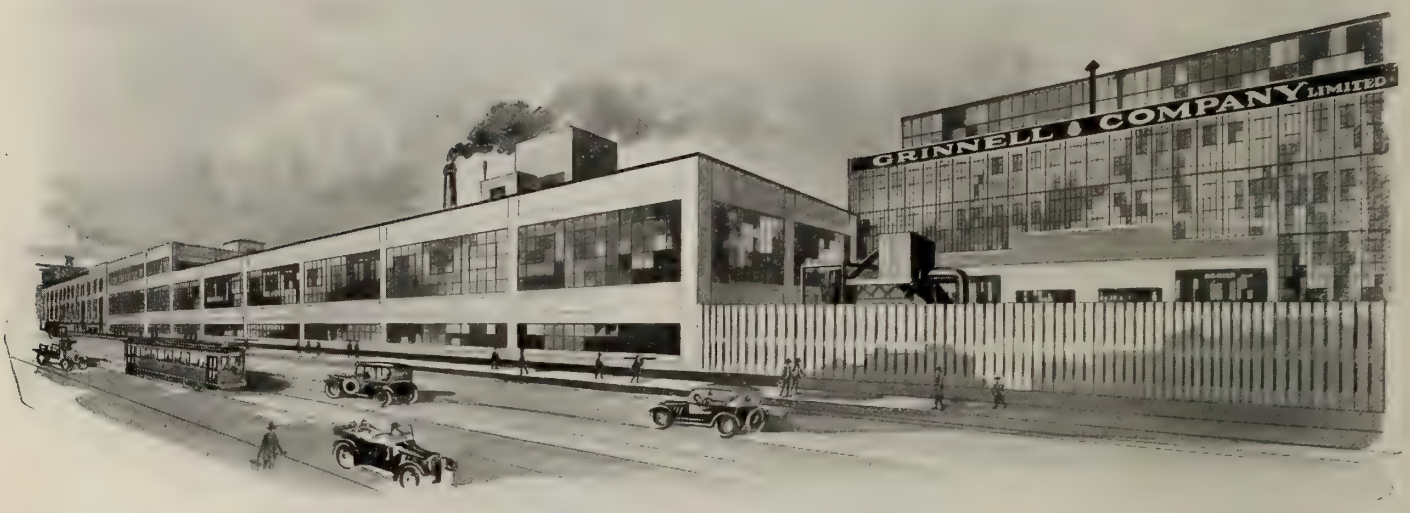
Let us know of your requirements, and we will be pleased to send estimates. We also manufacture Steel Filing Cabinets, Steel Lockers, Steel Shelving, Bank and Office Fittings, Wire Goods, Iron Castings, Etc.

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SINCE 1864



The Grinnell Plant at Toronto Is Equipped With Jenkins Valves

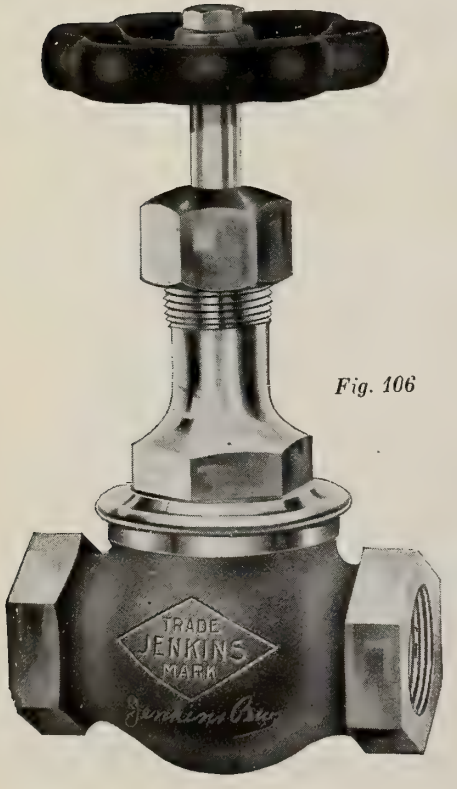


Fig. 106

Like many other manufacturers with big production and wide distribution the Grinnell people fully appreciate the importance of dependable valve equipment.

Naturally when it was a question of dependability they chose Jenkins—the valves with the Diamond Trade Mark.

Hence Jenkins Valves, through the efficient and trouble-free service they render, are playing an important part in the production of the well known Grinnell Sprinkler Systems.

Jenkins Valves are made in types and sizes for every service everywhere. They can be installed with confidence to furnish maximum service and to function satisfactorily under unusual conditions and "hard" usage.

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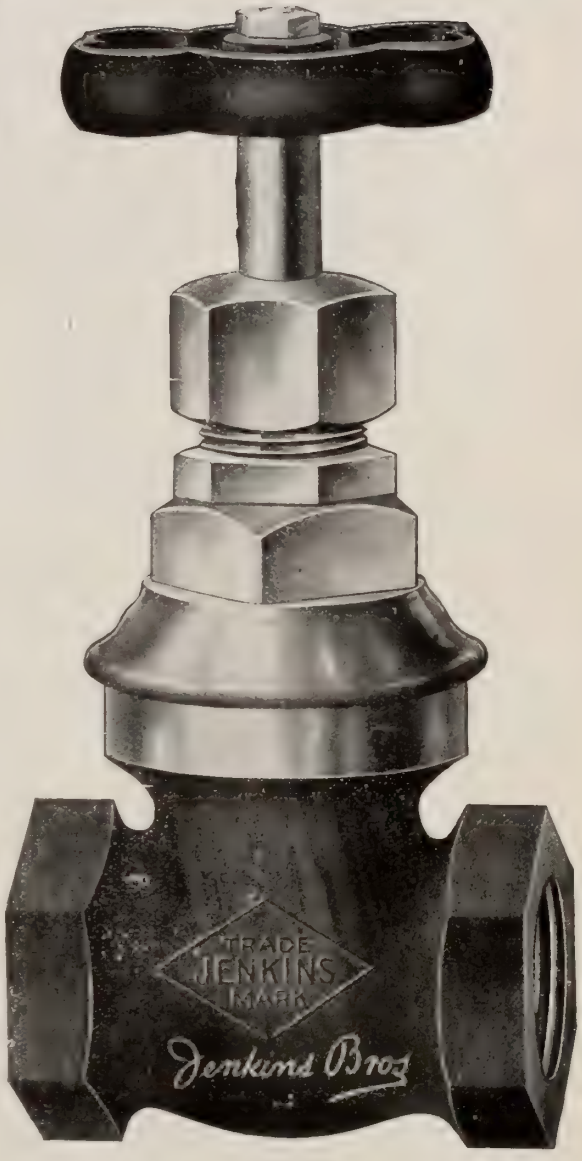


Fig. 300
Jenkins Brass Gate Valve
TYPE "K"

Suitable for 125 lbs. working steam pressure, 175 lbs. water pressure.

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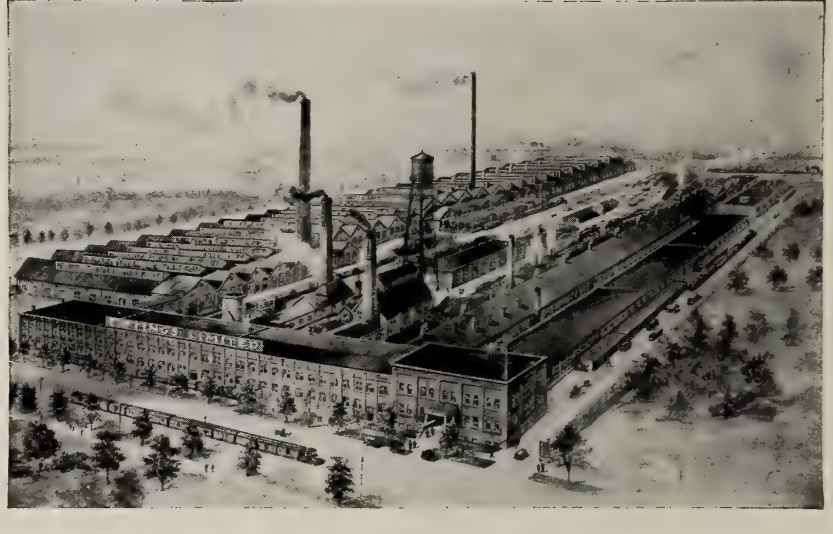
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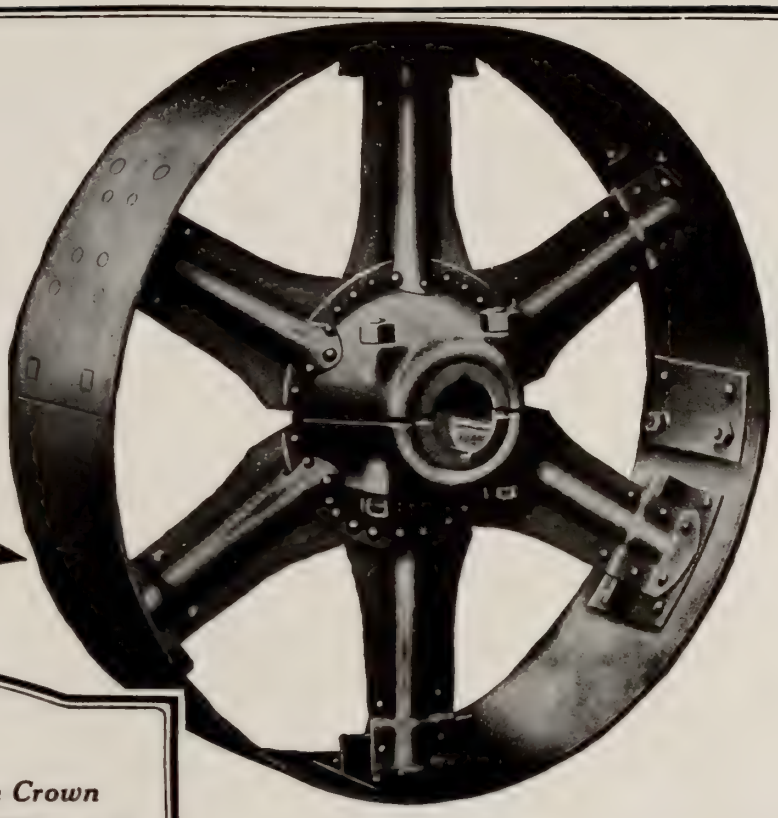
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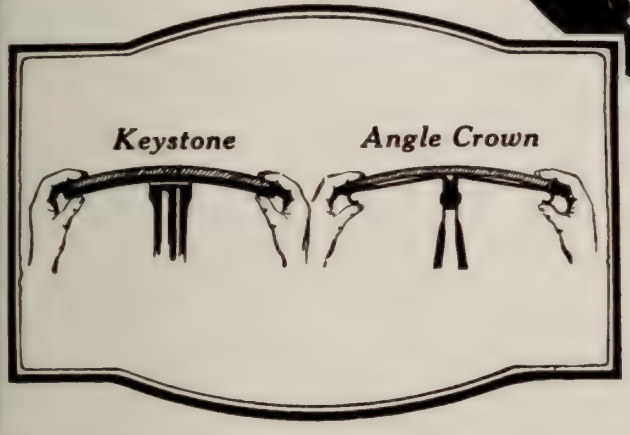
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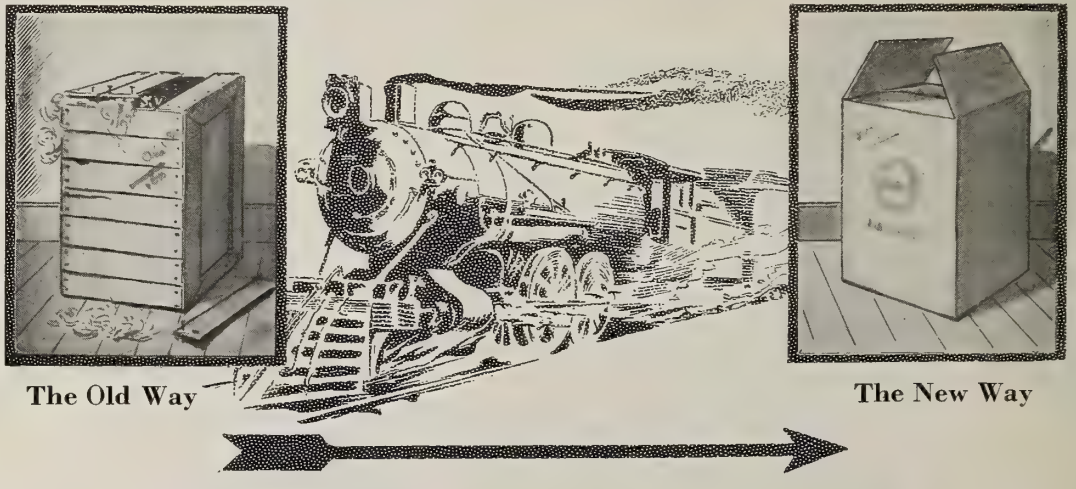
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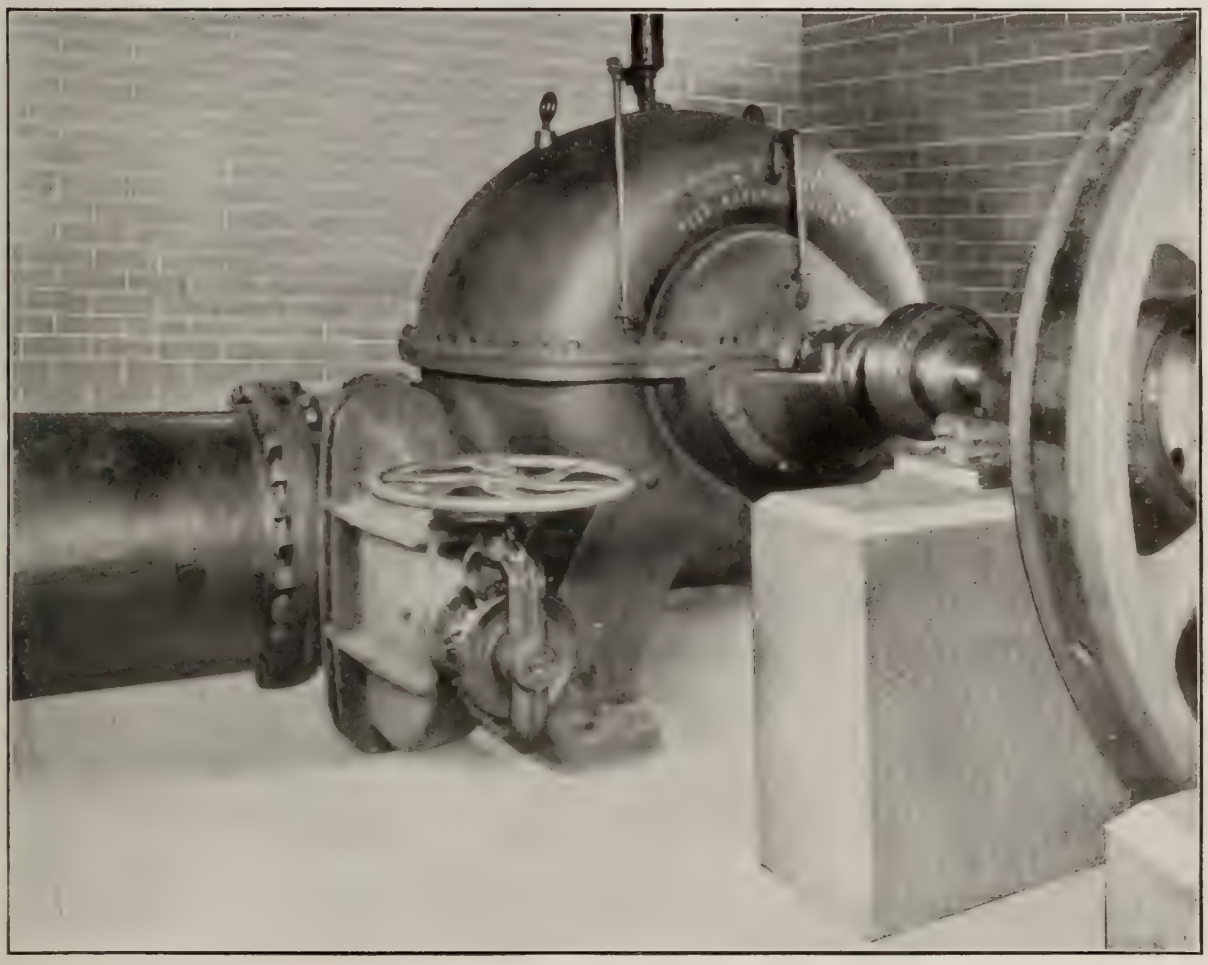
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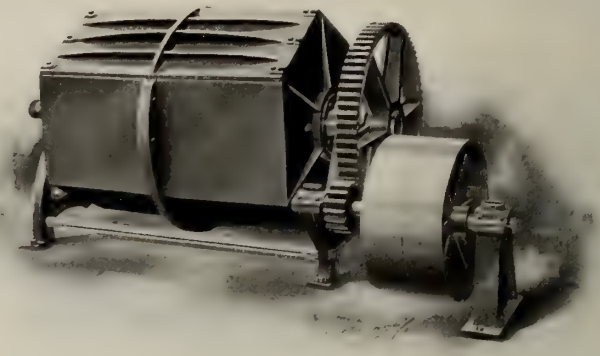
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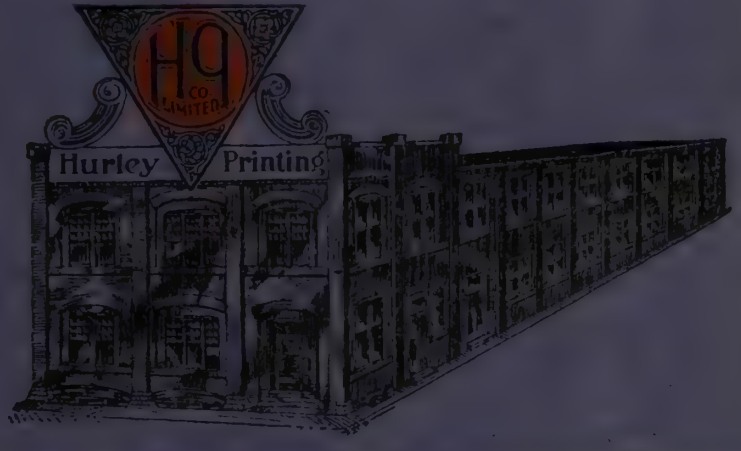
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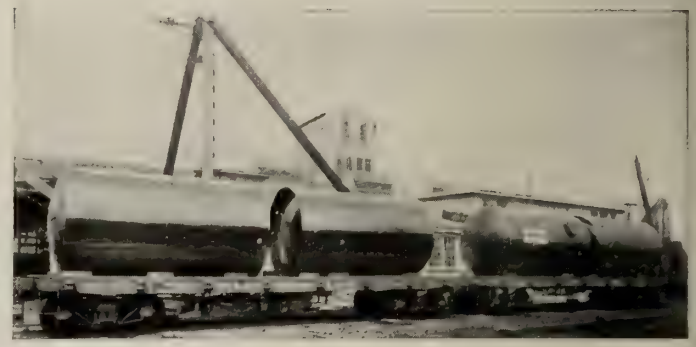
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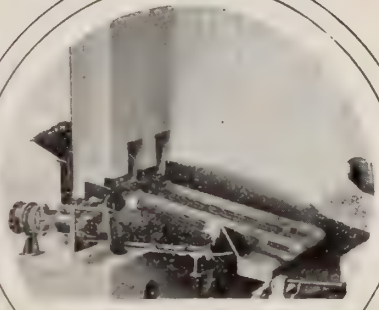
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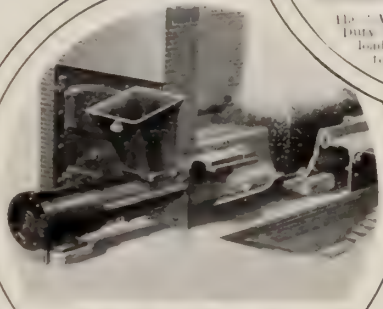
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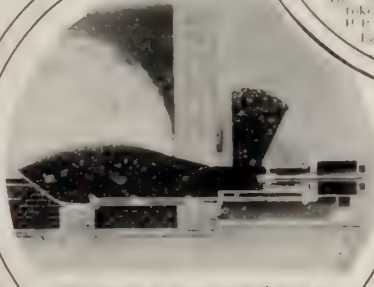
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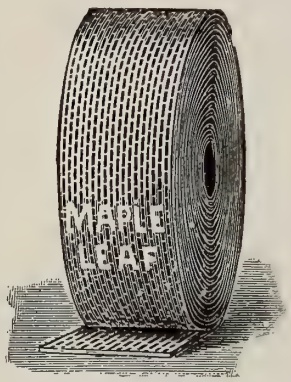
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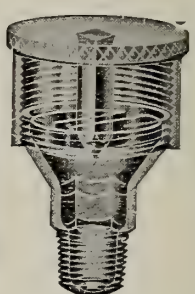
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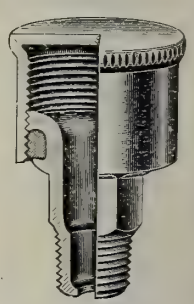


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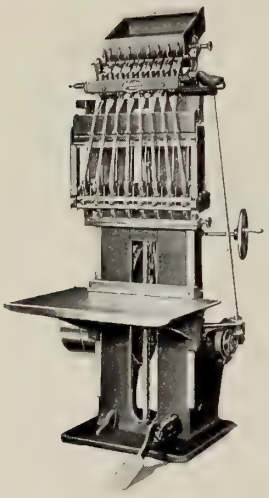
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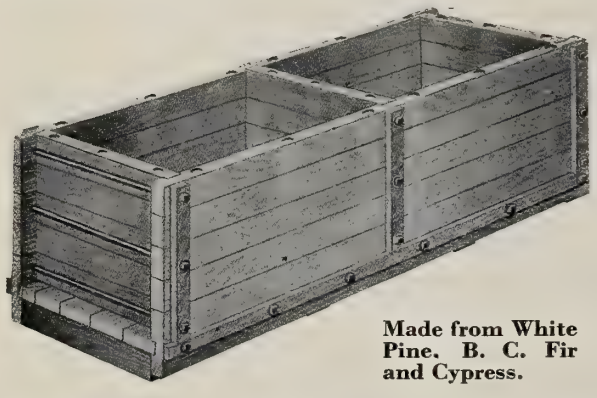
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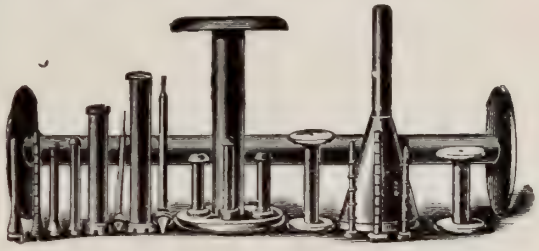
124,804	177,104	188,765	207,256
126,703	179,009	198,360	208,274
161,580	179,983	198,593	209,563
165,243	180,541	198,594	205,353
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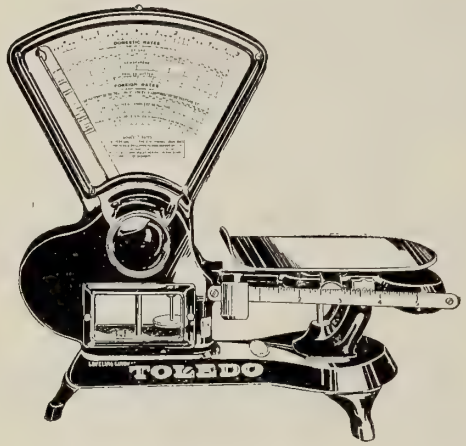
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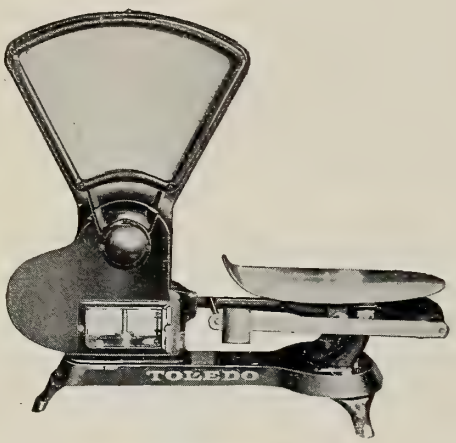
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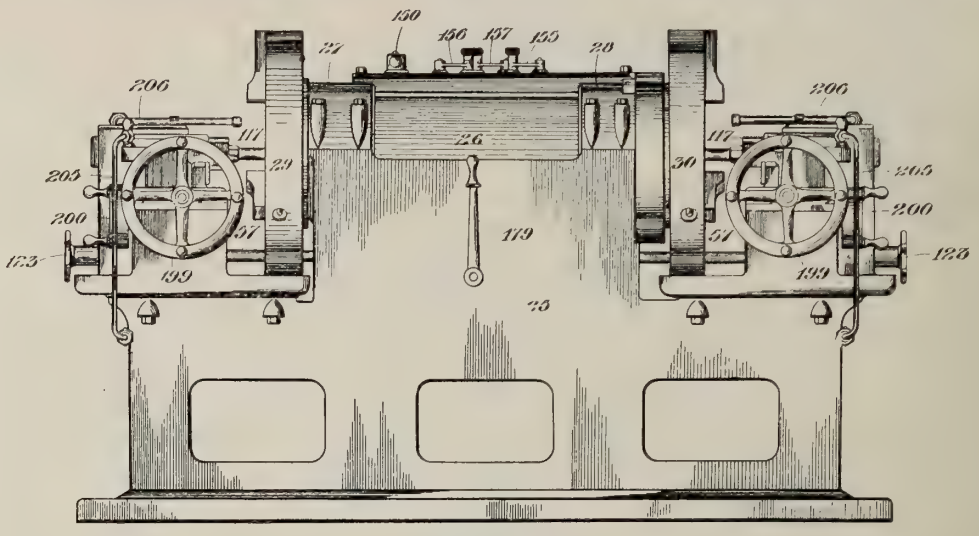


Fig. 4.

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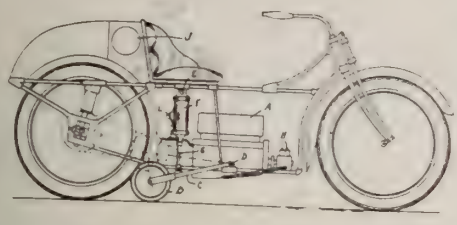
Yours truly,
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F. Gordon, Mgr.

FG/MH

HAROLD C. SHIPMAN & CO.

Attorneys and Counsellors in Patent and Trade Mark Causes
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(10 Expert Draughtsmen—nothing too complicated to detail on paper)

PATENTS FOR SALE



MOTOR CYCLES. This invention relates to improvements in motor cycles and comprises the combination with side supporting wheels of an air cylinder, means for raising and lowering said supporting wheels operated by air pressure in said cylinder, a governor connected by gearing with the motor cycle, and means operated by said governor to automatically control the admission of pressure to said cylinder. For full particulars regarding the sale of his Canadian patent, communicate with Mr. Andrew J. Purdy, 568 Golden Gate Ave., San Francisco, California.



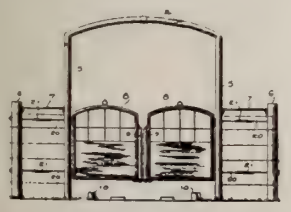
APPARATUS FOR CONTROLLING THE FLOW OF LUBRICATING OILS IN MOTOR VEHICLES: This invention relates to an apparatus for controlling the flow of lubricating oil in a motor of motor vehicles, and has for its principal object the provision of a simple and efficient means for supplying the motor throughout its length with sufficient lubricating oil whether the motor is on a level or on an incline, by reason of the motor vehicle either travelling along a horizontal or level road bed or ascending or descending a hill. For full particulars regarding sale of Canadian and United States patents, write Mr. Bert G. Gartin, 5032 South K. Street, Tacoma, Washington, U.S.A.



CONVERTIBLE LADDER: This invention relates to a convertible ladder comprising a pair of main sections in open structural form flexibly joined at one end, one of said sections being provided with end pieces forming the top and bottom rungs of the ladder, an auxiliary section pivoted to the main section intermediate of said end pieces and having cross pieces forming the central rungs of the ladder, a rack secured on the inner side of the free end of the other of said main sections and having notches therein adapted for selective engagement by the end piece of said auxiliary section when said auxiliary section and its supporting main section are extended in substantially "X" shape. Write Mr. Ezra P. Drehmer, Dunnville, Ont., Canada, who has Canadian patent for sale.



DEVICE FOR SECURING REMOVABLE TREADS: This invention relates to improvements in a device for securing removable treads comprising a clamp device for securing treads or garters on tires of motor vehicles, clips removably attachable to the circumferential or segmental opposite edges of the tread or garter, screw bolts provided with heads adapted to engage with said clips, links carried by the said bolts, heads on said links adapted to engage with the shanks of jaw members positioned on opposite sides of the rim, a tension bolt connecting said shanks and capable of effecting the engagement or disengagement of said jaws with the adjacent faces of the rim substantially as described. For full particulars regarding sale of Canadian Patent write to Mr. Roger Allan Mudge, 17 Loma Street, Cottesloc, West Australia.



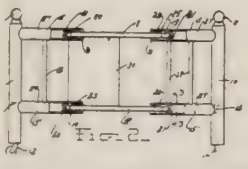
GATE-OPERATING DEVICES: This invention relates to a gate operating device, and has for its object to provide a device of this character which is operated by a slight pressure from a vehicle or pedestrian and automatically swings to the side to provide an entrance. Another object of the invention is to provide a device of this character having a novel hinge to which a cable and spring is attached, the hinge and cable remaining in inoperative position when the gate is in alignment with the cable and operative when the gate is moved slightly out of alignment with the cable. Write Mr. E. F. Lowe, Lou, Texas, who has Canadian and United States patents for sale.



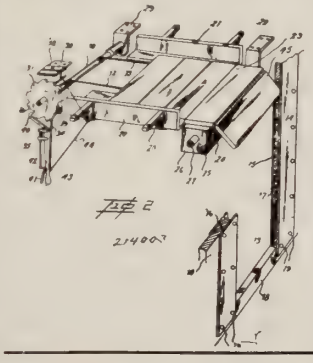
HEATING STOVES: This invention relates to improvements in heating stoves, comprising in combination with a heater including a vertically extending air flue and an ashpit provided with a side opening and an ash discharge opening in the bottom thereof, of a rotary scraper resting upon the bottom of said ashpit and consisting of an annular band having openings therein, an inner annulus spaced from said band and surrounding the base of said air flue, and plate-like radial arms connected to said annulus and said band, whereby an implement may be inserted through the side opening of said ashpit to engage one of the openings of said annular band, thus allowing the scraper to be revolved, as and for the purpose set forth. For full particulars regarding sale of Canadian Patent communicate with Mr. J. C. Sutton, 503 Kinney Ave., Mt. Pleasant, Michigan.



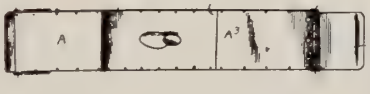
WRENCHES: The present invention relates to improvements in wrenches, and more particularly pertains to the instantaneously adjustable type of tool. The principal object is to provide a device of the character described, having gripping elements adapted for adjustment by the movement of the shank or handle to open or close the jaws. A further object of the invention is to provide a wrench which is composed of relatively few parts, and thereby of simple construction, and which is further operable by the movement of the shank. Write Mr. John P. Pletschet, Muenster, Sask., Canada, who has Canadian Patent for sale.



TELESCOPIC BEDS: This invention relates to improvements in Telescopic beds consisting of a bed frame constituting pairs of posts at the head and foot thereof, longitudinal elements extending between said posts at the sides, and castors engaged with the bottom of said posts, of pairs of tubular elements extending laterally toward each other from each of said posts, vertical brace rods extending between said tubular elements, bars having forked ends, rollers carried in the forks of said bars enterably into said tubular elements and spring detents at the ends of said bars engageable in openings formed in said tubular elements whereby said posts may be fixedly held at different distance apart. Mr. Marcin Stefanski, R.2, Box 112, Sterling, Mich., has Canadian patent for sale.



GRAIN DOOR FOR BOX CARS. This invention relates to improvements in grain car doors and the principle object is to provide a door of the character described, which may be readily adjusted to close the door opening. A further object of the invention is to provide an attachment for the ordinary box car whereby the same may be used for the transportation of grain. Another object is to provide a door formed in sections, whereby the door opening is regulated for the passage of the grain there-through. Mr. Edwin Cowie Shaunavon, Saskatchewan, has Canadian patent for sale.



WATERSHOES This invention relates to new and useful improvements in water shoes and it has for its object to provide a device of this character which, when not in use as a water shoe, may be collapsed and folded to facilitate easy carrying of the same on land. A further object of the invention is to provide water shoes of this form which may be inflated and used as a pneumatic mattress for sleeping purposes when occasion may require, and further to provide water shoes, which when inflated and secured to the feet of a wearer, will enable him to travel upon the surface of a body of water with ease and safety. Write the inventor, Mr. Arthur P. Horn, 246 Pike Street, Cincinnati, Ohio, who has Canadian and United States patents for sale.

Harold C. Shipman & Co., Patent Attorneys, Ottawa, Canada

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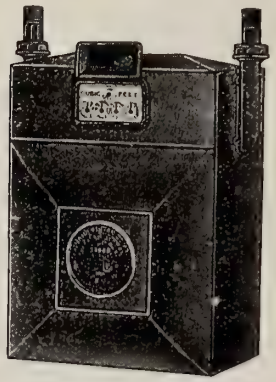
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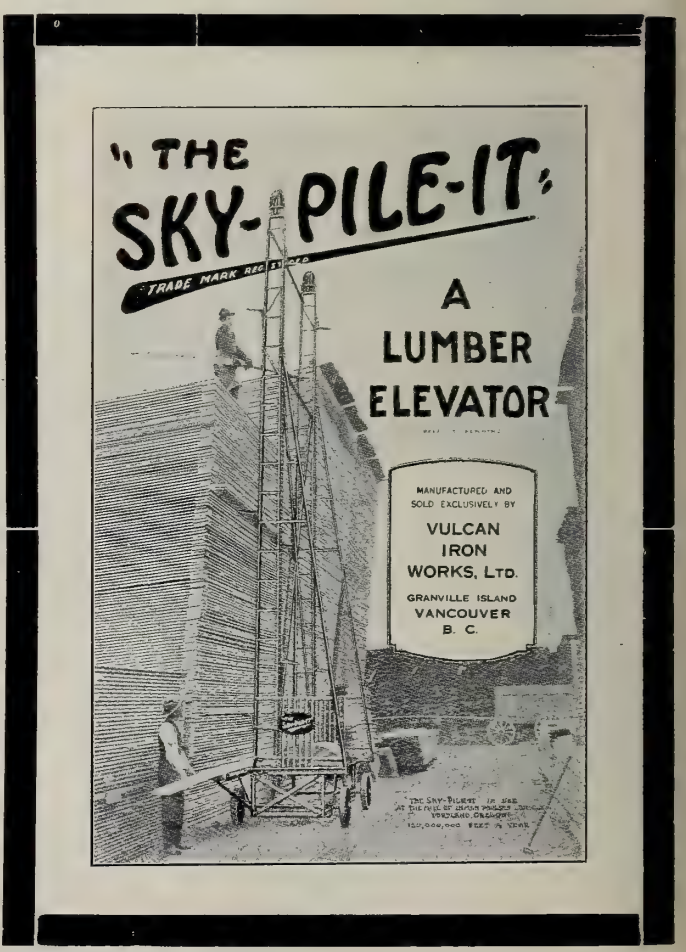
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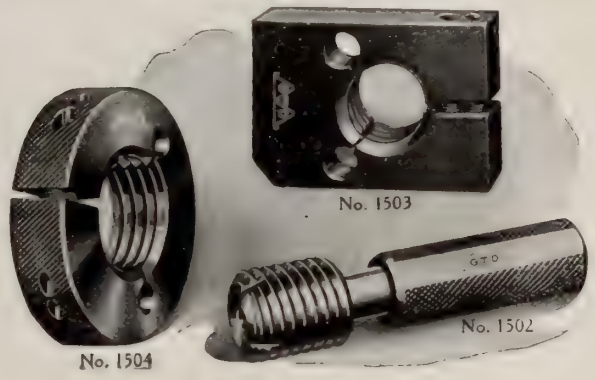
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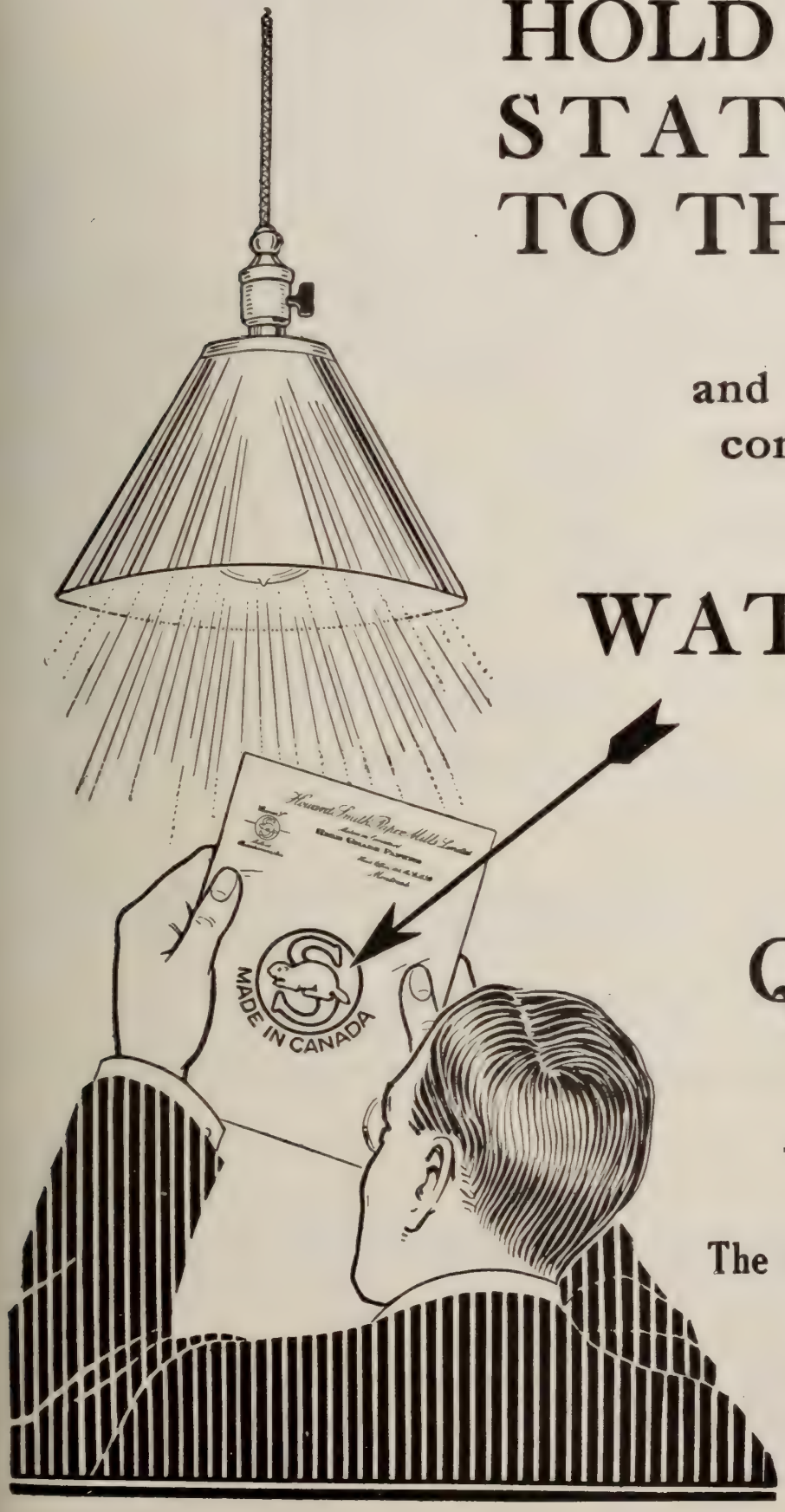
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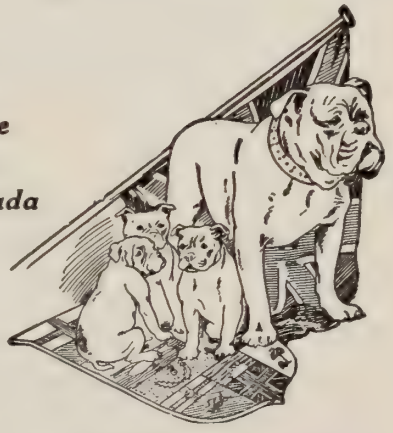
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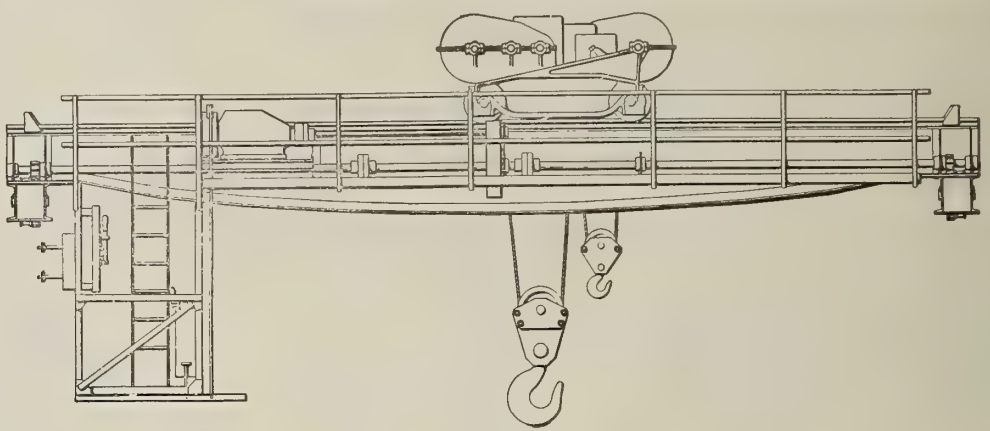
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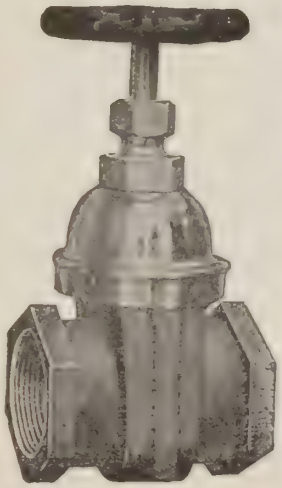


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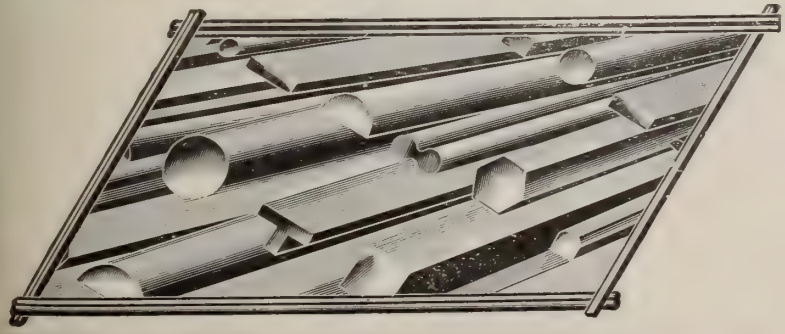
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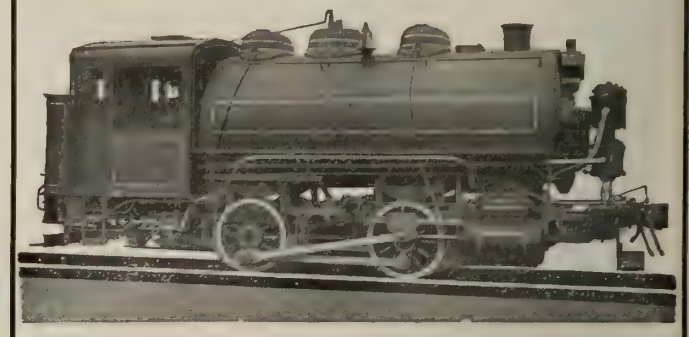
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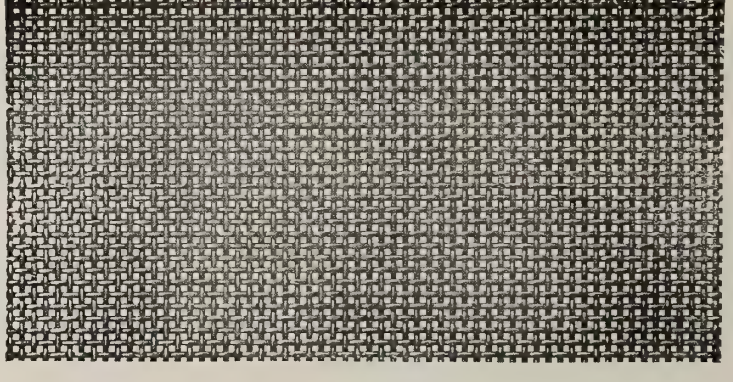
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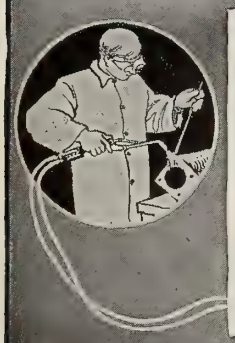
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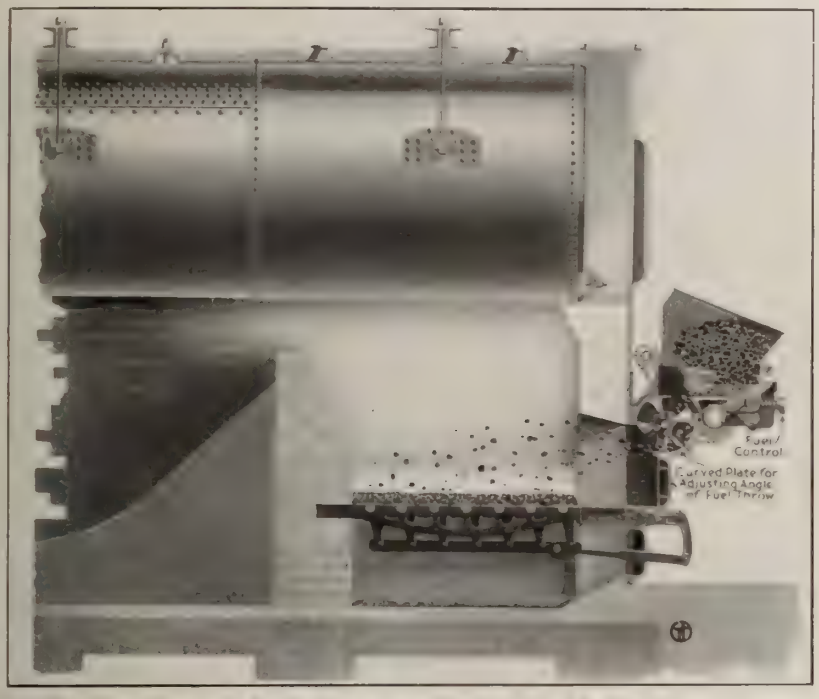
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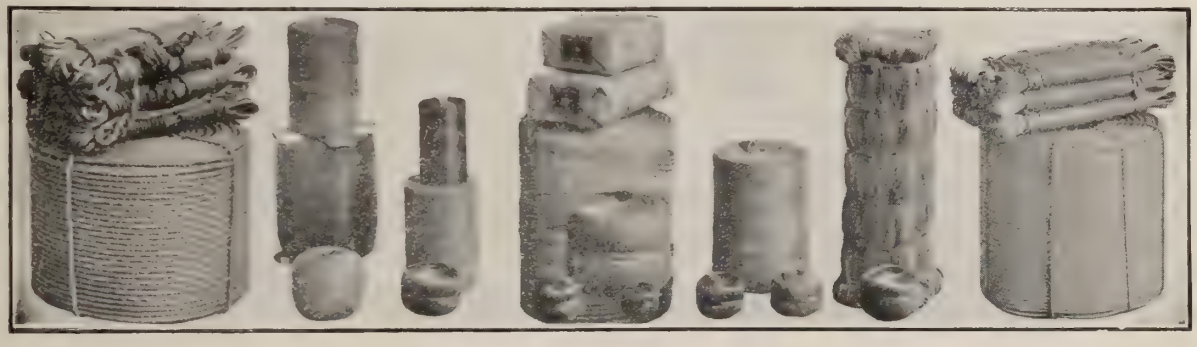
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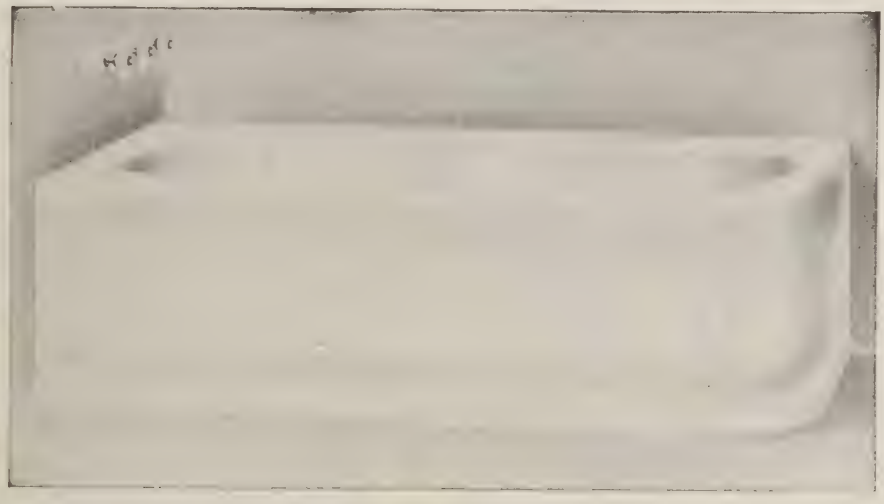
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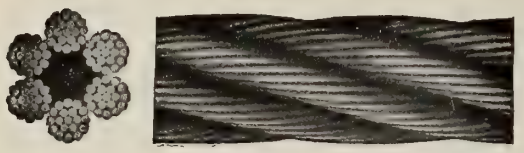
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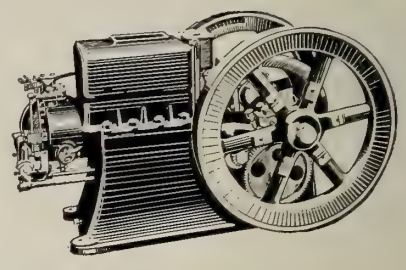
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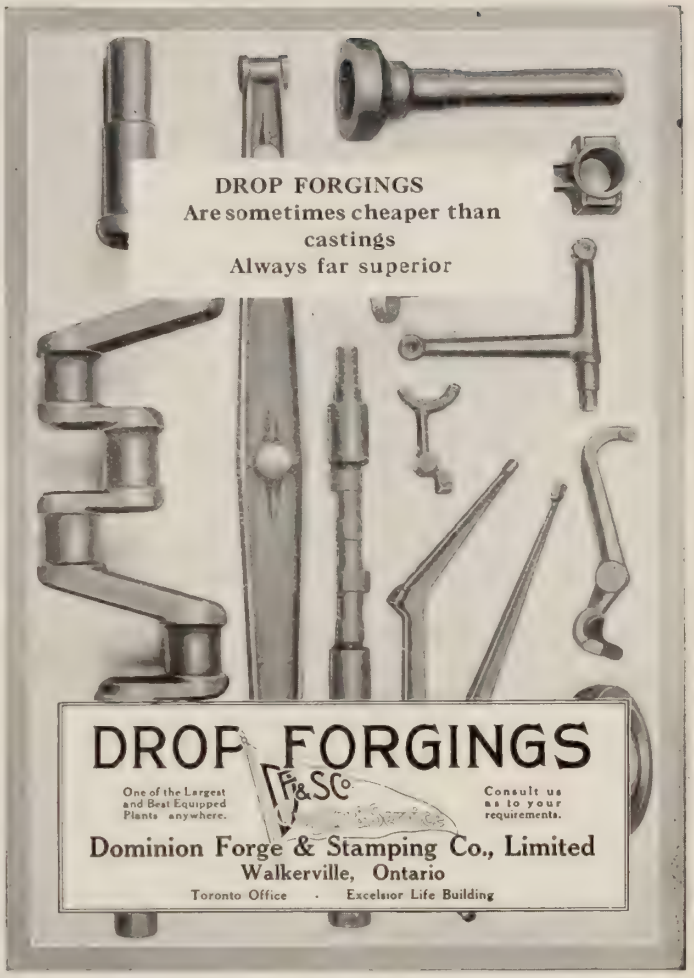
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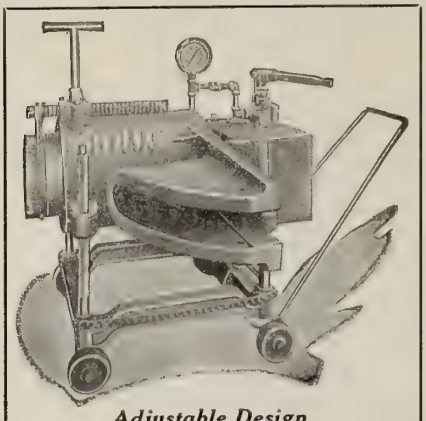


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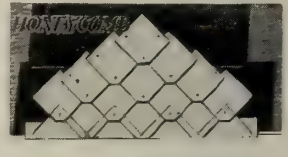
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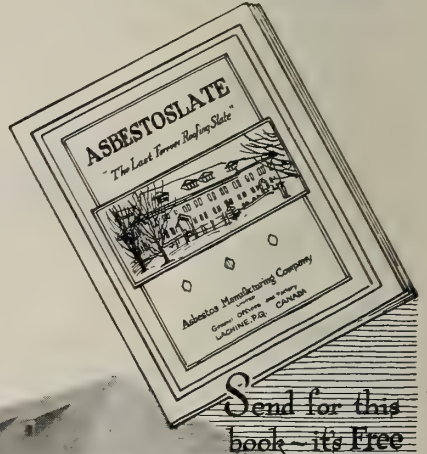
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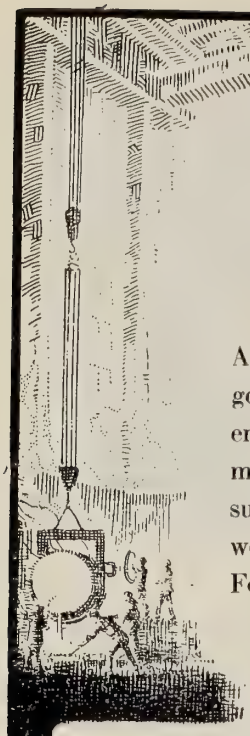
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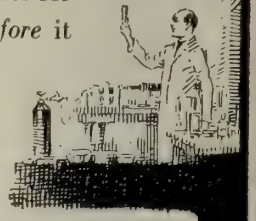
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Head Office - Dunnville, Ont.
Factories: Dunnville, St. Thomas, and St. Catharines, Ont.

1200° F. in 28 Minutes

This Temperature was attained with a Westinghouse Hevi-Duty Electric Furnace

TRADE MARK

HEVI-DUTY

Reg. U. S. Pat. Off.

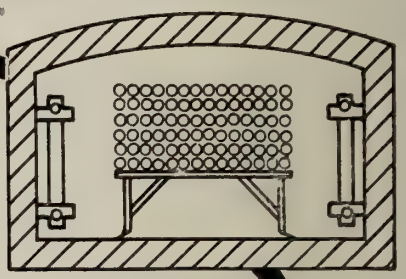
A New England manufacturer made a test of the relative merits of the processes of heat-treating between two types of electric furnaces.

One had the heating elements placed at the sides of the furnace chambers only; the other, a Westinghouse Hevi-Duty Electric Furnace had the heating elements placed at the sides, top and bottom of the furnace chamber.

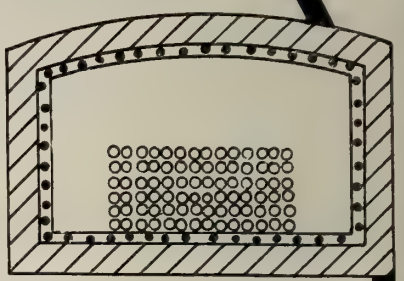
The same mass of brass tubes was heat-treated in each furnace.

The time required to reach a saturated temperature in the mass to the required 1200 deg. F. in the side-heated furnace was 2 hours and 25 minutes.

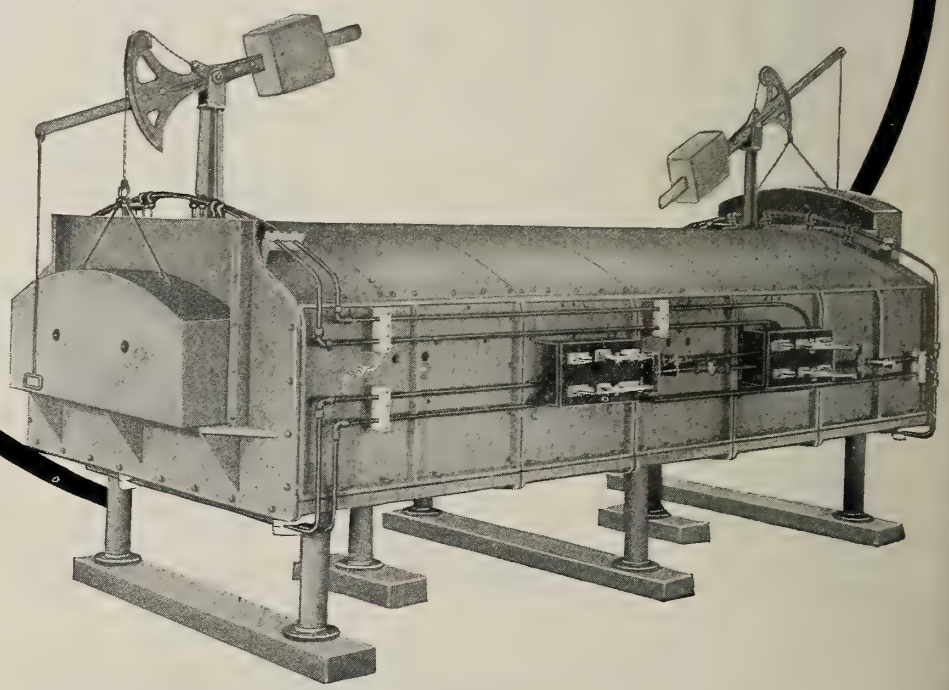
The time required to attain the same temperature by the Westinghouse Hevi-Duty Furnace was 28 minutes.



2 hours and 25 minutes required to reach 1200 deg. F. Heating elements on side walls. Load 1000 lbs.



28 minutes required to reach 1200 deg. F. Heating elements completely surrounding the heating chamber. Load 1000 lbs.



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OTTAWA, Ahearn & Soper, Ltd.
WINNIPEG, 158 Portage Ave. E.
EDMONTON, 211 McLeod Bldg.

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Issued monthly as the official publication of the Canadian Manufacturers Association (Incorporated), and devoted to the advancement of the industrial and commercial prosperity of Canada

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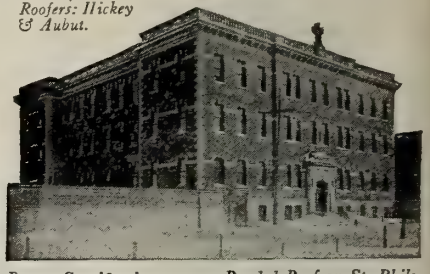
MONTREAL TORONTO WINNIPEG VANCOUVER
ST. JOHN, N. B. HALIFAX, N. S.



Barrett Specification 20-year Bonded Roof on Dominion Flour Mills, Ltd. Eng.: J. M. Robertson, Ltd. Gen'l Cont.: A. F. Byers & Co., Ltd. Roofers: Douglas Bros. Co., Ltd.



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Barrett Specification 20-year Bonded Roof on St. Philomene School, 5th Ave., Rosemont, Montreal. Owners: Catholic School Commission, Montreal. Arch.: Vautrin & Bernier. Gen'l Cont.: Ulric Boileau, Ltd. Roofers: J. E. Hardy.



A Bird's-Eye View of the Wholesale and Business Section of Montreal.



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Industrial Canada

ISSUED BY

The Canadian Manufacturers Association
INCORPORATED

Vol. XXIII. TORONTO, JANUARY 1922 No. 9

Editorial Comment

The Consensus of Opinion.

ON the whole a note of encouragement runs through the reports on trade conditions assembled in this New Year number of INDUSTRIAL CANADA. Here and there in the collection some manufacturer expresses rather gloomy views as to the immediate future but our correspondents to the number of over one hundred and fifty are practically a unit in the belief that before the end of 1922 a decided improvement will have set in. This is indeed a cheery way of beginning a new year and if everybody takes the attitude of expectation and will do his share to keep the wheels turning, then there should be no fear as to the ultimate outcome.

The Question of Freight Rates.

IF one cause more than another is advanced as a reason for dull business, it is high freight rates. Again and again in the course of their comments on industrial conditions, manufacturers point to this item of cost as a principal obstacle in the way of recovery. It is felt in the bringing in of raw materials and in the shipping out of finished products and, as is pointed out by more than one commentator on conditions, it is contributing to keep up the cost of commodities in the face of world-wide demand for cheaper goods. Manufacturers realize that the root of the trouble is the high wage scale in force and they claim that, before any marked improvement in business can take place, wages of railway employees must be brought more nearly into line with those of other labor.

A Criticism from the West Indies

OUR attention has been called to items appearing in the Barbados "Agricultural Reporter" and the Barbados "Advocate," commenting unfavorably and in extravagant language on the unsatisfactory nature of transactions with Canadian business houses. The "Reporter" claims that Canada is making a horrible failure of her business with Barbados, while the United States is making a great success. The "Reporter" omits to consider that, while the total importations into Barbados have not quite trebled since 1906, Canada's share has increased almost nine fold in the same period.

The "Advocate" cites two unverified incidents, quoted from another paper, in an effort to show that Canadian prices, despite preferential rates and favorable exchange, remain high, and sees in this a ground for a complaint against the use of preferential tariffs. No account, whatever, is taken of the different economic conditions under which Canadian manufacturers are working, as compared with competitors.

The whole tone and language of the items would almost warrant treatment by utter silence, were it not that they reveal a serious lack of understanding of the Canadian attitude to the West Indies.

If these papers are representative of public opinion in the Islands, such incidents add other grounds for the undertaking by Canadian manufacturers of a tour of the West Indies to meet the people face to face, get to know their leaders personally, and obviate the recurrence of unpleasantness that has no place between friends.

The Branding of Shoes.

THE Executive Committee of the Shoe Manufacturers' Association of Canada has authorized the statement that, as a result largely of the efforts of the Association and the loyal co-operation of its members, the branding of Canadian-made footwear with names suggestive of United States manufacture has been discontinued.

"This regrettable practice was forced upon the manufacturers some years ago by the prejudice in favor of imported footwear and keen competition for business," the statement continues. "At that time it was exceedingly difficult to sell women's fine shoes of Canadian manufacture, if the purchaser knew that they were made in this country. This condition gradually has been changed and the public has come to realize that Canadian-made shoes of excellent quality are obtainable at prices substantially lower than those of imported footwear of similar grade. Fine Canadian-made shoes now can be sold on their merits and represent the best possible value.

"More than a year ago the Shoe Manufacturers' Association of Canada took a strong stand against the use on footwear of brands which might be misleading as to the country of manufacture. As a result, the old dies have been scrapped and some of the finest footwear produced on this continent and anywhere in the world is now made in Canada and is being so marked. Not a few of the members of this Association have refused orders calling for the use of the old stamps or markings and have lost trade rather than return to the former practice. The Association has been assured that the brand in reference to which there has been considerable publicity recently is not now being used and has not been employed at any time since the Association defined its position against marks of this character."

The Question of Hotel Charges

HOTEL proprietors should reduce their rates considerably. Some hotels have done so. Many have not. It is hardly necessary to point out that high hotel rates increase the selling costs of products, especially in Canada, where a great deal of travelling is necessary in order to make sales.

It seems reasonable to suppose that hotel rates should come down; and reference to the Labour Gazette, published by the Department of Trade & Commerce, Ottawa, November, 1921, page 1426, gives information to support this statement.

The index number shown is for wholesale prices of groups of commodities. Rise or fall of the index figures indicates a corresponding rise or fall in the prices of the articles included in the group.

25 articles, under the heading "miscellaneous groceries," had an index number of 113 in October, 1913. This index number rose to the high point in October, 1920, when it was 287. In October, 1921, it had fallen to 186.

17 articles, listed under "animals and meats," show an index value of 179 in October, 1913. This rose to a high point in October, 1918, when it was 354. In October, 1921, it was down to 240.

9 dairy products show an index value of 164 in October, 1913. This rose to 318 in October, 1920. In October, 1921, it was down to 229.

21 fruits and vegatebles show index value of 112 in October, 1915. This rose to 238 in October, 1918. In October, 1921, it had dropped to 204.

10 articles, used for fuel and lighting, show an index value in October, 1915, of 117. This index value rose to a high point in October, 1920, when it was 349. In October, 1921, it had dropped to 248.

48 building materials show an index value of 143 in October, 1913. This figure rose to a high point in October, 1920, when it was 375. In October, 1921, it had dropped to 279.

16 articles, used in house furnishings, show an index value of 128 in October, 1913. This rose to a high point in October, 1920, when it was 390. In October, 1921, it had dropped to 314.

20 articles, under the heading "textiles," show an index number of 137 in October, 1913. This rose to a high point in October, 1920, when it was 382. In October, 1921, it had dropped to 241.

These values indicate that the articles purchased by hotels, including manufactured articles shown above, have already dropped very considerably in price from the high point. We could quote other manufactured articles, such as 11 articles listed under the heading, "hides, leather, boots and shoes." These 11 articles show an index figure in October, 1913, of 165; it rose to a high point in October, 1919, when it was 412; in October, 1921, it had dropped to 163—actually lower than the prices for October, 1913.

Some hotels have reduced their rates; many others have not. As the above figures show that many sellers have made very large reductions in the prices of their products, including those sold commonly to hotels, it is submitted that it is only reasonable that they should expect a reduction in hotel rates, which form a very considerable part of the selling cost of their goods.

The Value of Safety Education

ACCIDENT reports show that there are many thousands of accidents that can be prevented by the exercise of ordinary care and forethought. Many accidents are due to the lack of safeguards on machines. The failure to provide safeguards lies at the door of the employer, who can, by a small expenditure, in most cases, prevent accidents and reduce compensation costs to himself and others in his class. Other accidents are due to defects in safeguards. An unsafe guard is a "snare and delusion" which will likely prove a trap for some worker who has relied on its efficiency. This is another problem of management, and must be faced by the manager. The foreman is the man to check bad shop practice; but he needs encouragement and suggestions, as well as instructions, from the manager.

Many more accidents are due to bad shop practice—a thing preventable on the part of an active and energetic manager. The foreman is the man to check bad shop practice; but he needs encouragement and suggestions, as well as instructions, from the manager.

Then, last, but not least, we have something commonly known as "carelessness" or "thoughtlessness." This can only be corrected by education in safety, which is one of the biggest problems in accident prevention today, not because there are no rules or standards but because of the magnitude of the whole question. Education in safety, from top to bottom, in industry, presents the answer to our accident prevention needs of today.

—R. B. M.

The Value of Statistics

DOUBT has, from time to time, been expressed as to the value of the statistics collected and compiled by the Dominion Bureau of Statistics. It is frequently an irksome duty for manufacturers to furnish the information called for; and where only simple methods of bookkeeping are observed, the full compliance with official demands may be attended with considerable trouble, while the information gathered in such circumstances might very possibly be of an unreliable and sketchy character.

It may be interesting to point out that the census idea is not of foreign origin, and that to Canada itself belongs the credit of taking the first census of modern times—the census of the colony of New France in the year 1666. It was a systematic "nominal" enumeration of people (ie., a record of each individual by name) taken on the

de jure principle on a fixed date, showing age, sex, occupation, and conjugal and family condition. It was not a mere report of settlement; but a census in the modern sense, and the first attempt at accurate enumeration of population since Roman times.

The first census in Europe—those of certain Germanic kingdoms—date only from the 18th century; and those of England and France, from the early years of the 19th century.

Manufacturers who desire such information as may be obtained from the Dominion Bureau of Statistics—and many do—will appreciate that such information cannot be obtained without performing the task of filling out forms, and will also recognize that any system of statistics must, of necessity, be lopsided unless it embraces all of the motion applied to materials from the moment they are harvested from the bosom of nature to the moment when they reach the hands of the ultimate consumer. The situation now is that, in Canada, under the Dominion Statistician and Controller of Census, R. H. Coats, we possess a Bureau of Statistical machinery of the most comprehensive and exhaustive character, which is able to provide invaluable selling data.—H. M.

Good Results from Accident Prevention

AS AN illustration of what can be accomplished by properly organized and directed safety work, the results of a year's campaign in the plant of the Algoma Steel Corporation are most illuminating. Accidents have been reduced by 69 per cent.; lost time by 72 per cent.; and compensation by over 61 per cent. As the company's paper, "The Algoman," says:

"Whereas, in times past, we had grown accustomed to the lugubrious old sing-song of 50 or 60 or 70 accidents every month—with our ward in the local hospital filled to the doors with our suffering fellow-workers, at present we find these figures slashed down to 15 or even 10—the majority only very slight injuries—and our hospital wards empty.

"We find our lost time cut from 1,700 days per month down to 100 days or so—a vast economic saving to us, as wage-earners, to say nothing of the elimination of pain and suffering, the increased efficiency, etc.

"We have seen our superintendents and foremen trying to outdo one another in preaching safety, in effecting safety improvements. In a word, we have seen ourselves and our fellows roused out of our former apathy on this accident question."

Call in the Policeman

HAS not the time arrived when the "bite" of the forest protection laws throughout Canada should be supplied with a few front teeth?

It was inevitable, of course, that lawmakers and law-enforcers, sharing the popular tradition of "inexhaustible forests" and "unscratched resources", should equip statutory penalties for timber destruction with semi-nullifying devices. Until very recently, a small percentage only of the Canadian people took any serious interest in forest conservation or believed for a moment that the nation's timber resources were in the slightest peril. Even today, to tell the man on the street that Canada owns not more than one-third of the timber growing in the United States, brings an incredulous stare. To tell him that Canada's problems in forestry are more imperative and economically vital than tariffs, good roads, votes for women, or the exchange rate, provokes a patronizing smile, albeit a willingness to hear more and be convinced. Is it much wonder, therefore, that the "bite" of our forest protection laws, as regards penalties for carelessness in causing fire, has reflected the indecision, the indifference and lack of conviction characteristic of public opinion. Magistrates are prone to inflict the maximum penalty on the "vandal" who burns down his neighbor's woodshed, because that is the measure of public indignation, and seems equally prone to treat with compassion the "unfortunate fellow" who destroys ten million feet of our small reserve of white pine.

In many parts of Canada, however, a change has come about. Penalties have been increased; loopholes have been blocked; and, mainly through the good work of the Government Forest Services and the forest protective associations of Quebec, the sympathy and co-operation of local magistrates, in many places, have been won. Probably the indifference of the local magistrate stands less in the way than the indifference and lack of punch in the local protection officers. Some districts in British Columbia, for example, have this year received such a vigorous demonstration of law enforcement that campers, farmers, and others likely to start fires, now look upon carelessness as costing so much an ounce. In fact, a good many of them, having been found guilty of damaging the forests by fire, are now paying their fines, as some people pay for a phonograph, with "five dollars down and five dollars a month." The instalment plan of paying fines looks like a new find in psychology, spreading the painful lesson over many months.

Educational propaganda is the finest possible fire preventive with the great majority of people; but it needs a stiff supplement in legal penalties for the stubborn residue.—R. B.

Our Illustrations

AS a feature of this special year-end issue of Industrial Canada, we are including a series of photographs illustrating some of the more important industrial developments of the past year. While we have covered in this way a considerable number of the year's events in the way of plant erections and enlargements, transfers of industries, and the establishment of new industries, no pretence is made that the series is complete. There are doubtless other developments among members of the Association which should have been included. If any feel that they have been overlooked, the editors would be pleased to have them send in photographs and descriptive matter covering these matters for publication in later issues.

New Year Messages from Association Officers

The President

LET me take this opportunity to express to all our members from the Atlantic to the Pacific my heartiest good wishes for the New Year.

What has 1922 in store for us? This is the question uppermost in the minds of everyone. Who can answer it satisfactorily? As to what degree of prosperity it will bring, no one can safely predict. That we still have difficulties to face before things return to normal there can be no doubt. The results will depend very much upon the state of mind with which we approach them.

While the war with its undue expansion gave a tremendous impetus to our industrial life and has been the means of developing many lines that otherwise would have taken us years to accomplish, it brought in its train a great measure of discontent. Many ideals were built up which are now being shattered, and people generally are beginning to realize that only by hard work and close application with a willingness to give the best they have, whether in labor or materials, can they hope to prosper.

This country, as well as the world at large, needs the experience we are passing through in order to bring about a return to safe and sane methods and to make us realize that economy and industry are essential to our safety; that we must work harder and produce more in order to hold our own markets and create a surplus for export; that we should cut out as far as possible imports of non-essentials and luxuries and utilize our generous share of raw materials and natural products to a larger degree.

The resources of this country are large and varied, embracing as they do, the wealth of the farm, the forest, the mine and the sea, thus offering great possibilities to men of energy and grit who are not afraid to work.

Perhaps among our resources there is nothing more important than the climate and its influence in developing a healthy vigorous race of men and women, as after all, the greatest assets any country can have are its industrious and ambitious people, who find satisfaction and scope in meeting and overcoming difficulties.

The period of deflation has not yet entirely run its course but is making good headway. While this process is going on, retrenchment and economy should be the order of the day and with it will come a period of reduced wages, lower earnings and smaller profits, when everyone will be compelled to spend less and earn more.

In view of future possibilities let us not lose sight of the strategic geographical position Canada occupies as the chief link of one of the greatest highways of the world, the cheapest and quickest route between Europe and the Orient, a route over which a rapidly increasing share of world commerce and travel is bound to flow.

Meantime, looking over the situation as a whole, we have every cause for extreme thankfulness at the way in which this country has stood up under the stress and strain. We can look forward hopefully to that time when the clouds will have rolled by and when the country will move forward with new life and vigor, when people from other countries will flock to our shores, filling up our vacant lands and, in helping to develop our latent resources, making for themselves happy and prosperous homes in our midst. Let us be ready to give these new comers a hearty welcome and a helping hand so that they may join with us in building up a great nation on the northern part of this continent.

W. S. FISHER.

The First Vice-President

MAY I be permitted through the columns of "Industrial Canada" to convey to the members of the C.M.A. my very best wishes for the New Year.

Our national, business, and personal affairs, never before in the history of our country required greater concentration of thought and effort. How the great problems thrust upon us are to be solved, and difficulties overcome, calls for the best that is in us. Individually we can do our part. Collectively, and by co-operative effort, we can do much more. The benefit to be derived from such an organization as ours is of incalculable value to the country. Let us, therefore, pull together and by making conditions better than elsewhere attract emigration because we need people to help us carry our burdens.

JOHN R. SHAW.

The Second Vice-President

HEARTIEST Greetings to all members of the Canadian Manufacturers' Association, and best Wishes for a Prosperous and Happy Year in 1922.

We have gone through a very serious period of deflation, and we now are on the ascending scale. The year past has shown that Canadian manufacturers have been able to carry on through the most adverse business conditions that we have ever seen, which shows that the energy which produced war munitions, when they were required, is still with us, and that this same energy devoted to the production of Canadian goods, and to the exportation of these goods to the different markets of the world, will bring renewed prosperity to Canada.

A great many new industries have been opened up in Canada during the past few years, and I believe these industries will supply the Canadian consumer with his needs at a moderate price and we will be able to export a reasonable amount of goods.

Labor conditions have been, and are, serious, but the unemployment is gradually being taken up, and I believe during the year 1922 we will hear very little of unemployment.

There are many questions of national importance to be settled, which is to be expected after going through this great crisis, but I am satisfied that the good sense of the Canadian people will enable a satisfactory conclusion to be reached.

The slogan for all good Canadians is to purchase Canadian produce in all instances where possible, to import the minimum and to export the maximum.

C. Howard Smith.

The Chairman of the Maritime Division

WHEN the Wise Men came from the East (and of course they still do!) they probably travelled less than a thousand miles, although in our conception from childhood, their journey was one of infinite distances.

And yet as we in the East, think of our fellow members in the C.M.A., our minds in travelling from one locality to another, ever westward, over our far-flung Dominion, are covering distances only equalled in those days by the outermost bounds of the then known world—the Roman Empire.

Distance is at once our glory and our challenge, for distance is not greatness, until it is conquered. Our objective for Canada must be two-fold, to conquer distance in miles and distance in men.

Looking back over 1921, we congratulate the C.M.A. on its fight in the latter field. While forces were working amain to separate class from class, it would be hard to over-rate the benificent influence of the campaign of education, directed from our head office, appealing to Canadians to help each other, so that within and without industry we learn to work together with the finest team play.

We have conquered mightily the distance in miles, but we lost ground latterly, for dollars in rates equal distance in freights. We, of the Maritime Division, know B.C. will join us, and all the rest between, when we, amid all our good wishes, especially remember the traffic department, that 1922 will bring fresh worlds conquered in the field of reduced rates, as their laurels.

Mr. Babson tells us that righteousness, born of adversity, is the cause of ensuing prosperity. Doubtless, our members will agree that the adversity stored up in the four thousand odd of us, during 1921, has powefrul potentiality for prosperity, if this be true.

On behalf of our Maritime members, we extend to you all, the hearty wish that such prosperity and happiness may be yours for 1922.

L. W. Simms.

The Chairman of the Quebec Division

IN a great many instances the industries of the Province of Quebec have been founded on more energy than capital. This accounts for their gameness and robustness. The hard times of their beginnings have developed a natural fitness to adapt themselves to the conditions of life and power of quick recuperation after a crisis.

Thanks to the institutions and the classes of this part of the country, we have been able to stand very well so far the accidents of readjustment and reconstruction after the wonderful achievements of a long war period. Willingness to keep working, while submitting ourselves to more stringent measures of economy, has been the key of provincial success here during the last year, and the purchasing power of the population has not been found wanting.

With a spirit of national co-operation, we look back to the departing twelve months and find reasons to believe that the community is satisfied that we have done our duty. Also looking forward to the task ahead of us, our utmost desire is to tackle it by the same methods of lasting energy, strict prudence, and the ambition of demonstrating to the country at large that we are as proud as any, to belong to a young and noble nation, while we show our patriotic confidence in its future by doing our share in the development of wonderful natural resources. This province is conservative in habit and considers agriculture as the first industry of the land.

Bearing this in mind, we take our time in expanding the manufacturing centers and we are always endeavoring to find a happy medium in the equilibrium of these two principal factors of Canadian production.

My message to our friends of Industrial Canada, together with our most sincere wishes for Christmas and the New Year is:—

Believe in us as we believe in you and the success of our patriotic slogan "Made in Canada" will always be an agreeable surprise in the Province of Quebec to all the Canadian Manufacturers.

J. H. Fortier.

The Chairman of the Prairie Division

CHRISTMAS—that magical Season, when the hand of good fellowship is extended throughout the wide world, is with us, and the Prairie Division members of the Association welcome the opportunity of extending to brother manufacturers in Canada hearty Season's Greetings and best wishes for Prosperity and Happiness for the coming year.

Manufacturers of the Prairie Division during the past year have pulled together as never before, and the efforts of the Association as a whole have been well rewarded. The Canadian Manufacturer's Association in the West enjoys more prestige and confidence this Christmas than at any other time in the history of the Association. Much has been done for members in this past year, and the fact that this is well recognized is evidenced by the solid support of the Prairie Division members and the increased membership in the West, in Winnipeg alone no fewer than 70 new members having joined since May 1st.

We are now passing through a period of business depression, but with the courage and enterprise that Cana-

dian manufacturers have always shown, difficulties will be met bravely, and difficulties will be overcome, until the clouds are dispelled and prosperity again graces us with her presence. So let the bells ring out the Old Year, and welcome the New, and let us remain thankful for the past, and tranquil and hopeful for the Future.

Again we extend our best wishes to all C.M.A. members for a happy festive Season, and a "bumper" business year for 1922!

W. G. FRASER.

The Chairman of the British Columbia Division

LAST year I remarked that, as a people, the residents of British Columbia were optimists. We still are. It has often been said that Noah was the greatest optimist history records, because he floated a company, when the world was in liquidation. In British Columbia, we are optimists like Noah. We have had to combat similar liquidation, having suffered severely on the lower mainland and the Coast from floods. Unfortunately, we lost both life and property. We could not replace the life, but, for the bereaved and suffering, our boards of trade obtained relief subscriptions to the amount of $75,000. The property losses, such as the homes of the workers at Britannia Mining Company's property, are being quickly replaced; concentrators, etc., will soon be producing as before.

We, in common with the other provinces of Canada, have had to do our part in the financial liquidation, a liquidation of values that came so suddenly that it staggered the citizens of all nations, but our manufacturers realized that the birthright of determination was still theirs to exercise. The price had to be paid and the optimists of British Columbia accepted immediately the task which confronted them, met financial losses with a smile, forgot the past, stretched forth the hand of assistance, wherever possible, to the less fortunate brother and co-operatively fought the markets for him, as was evidenced in the Made-in-B.C. campaign. Never has such unselfish service been shown to one another in business as this liquidation period has produced.

Backed by our Provincial Government, heads of practically all business interests are fighting the discriminatory freight rates which keep our products from our natural markets. Weeks were spent by many of our leading business men assisting the counsel in preparing their case. Sacrificing their time, a delegation attended the railway commissioners and attended all hearings in the Prairie Provinces and, when the final hearing comes in Ottawa at an early date, again our business men will go forward to assist, making the sacrifice in many instances for the general good, and we are just optimistic enough as good British Columbians to believe that, when we have shown the injustice from which we suffer, our task will be lightened by relief from discrimination.

Further, I wish to pay tribute to the vast majority of our citizens known as employees, who have willingly met the situation caused by world conditions and tried to keep production up by accepting a reduction in wages that permitted the product to be marketed. They must feel, as does the employer, the satisfaction to be derived from looking at the few cases of genuine unemployment that we have.

Our optimism is also rewarded by observing the large increase in the number of ships that are carrying from our various ports our products, including the wheat of the West, which is now moving more freely by our gateways and is more economically reaching certain world markets.

We are the youngest member of the C.M.A. family but are we downhearted? No! Watch 1922.

JAMES B. THOMSON.

The Chairman of the Ontario Division

THE Executive Committee and Officers of the Ontario Division extend to members of the Association their heartiest greetings for the New Year.

We entered the year 1921 with many misgivings as to what the future had in store for us, but, while we found it a very trying time indeed, the difficulties encountered have been dealt with in a most satisfactory manner.

An examination of imports and exports, bank deposits and loans, and the rising rate of exchange, all show that the position of Canada has improved, and while the deflation that has occurred has not been without hardship to industries and individuals, it has been of a more reasonably gradual character than might have been anticipated. There is every reason to believe that fundamental conditions are now approaching a sound and stable position, which should form the basis of a sound era of prosperity.

Believing as we do, that it is the destiny of Canada to become a great manufacturing nation, we may face the future with confidence that this new year will provide another mile stone in our forward march of industrial progress.

W. C. COULTER.

Our Annual Review of Industrial Conditions in Canada

SO FAVORABLY have our readers regarded the plan which was adopted two years ago, of devoting the major portion of the January issue to the publication of a collection of the views of a representative number of Canadian manufacturers, on the industrial situation and outlook, that it has been deemed desirable to repeat the feature this year. In the following pages, therefore, will be found, assembled under their appropriate headings, between one and two hundred reports specially prepared for this issue by leading manufacturers. The comprehensiveness of these reports, their thorough estimate of the situation, and the soundness of the views expressed will be apparent to all who take the trouble to go over them.

Briefly summarized, all these reports indicate that we have passed through a year of considerable depression in manufacturing industry. This was due, in the main, to world conditions, over which Canadians could exercise no control. It had its effect in low prices for agricultural products, which in turn reacted on the buying power of the people, leaving the consumer market weak and unresponsive. In some industries, after a period of slackness extending, roughly, over the first half of the year, improvement set in towards fall and continued until the end of the year. In other industries, dullness ruled throughout the year.

The raw material market was, on the whole, easy, with supplies plentiful and prices lower, the latter being now, apparently, pretty close to bottom. The labor market was likewise easy. Help has been in good supply. Wages for skilled labor have kept up on the average; but, for unskilled labor, have declined. Efficiency has been notably improved, many manufacturers stating that it was on account of the greater productiveness of the worker that they have been able to maintain wage scales.

Reports are singularly unanimous in their conclusion that the worst of the depression is over, and that, from now on, gradual improvement will take place. Some contributors believe that, by Spring, this upward swing will be clearly apparent; others are inclined to believe that it will not develop until later in the year. All are practically agreed that the present scale of freight rates is a serious deterrent to recovery, and that radical reductions would do more than any one factor to restore activity.

We would urge readers to devote careful attention to the following pages. They will well repay painstaking reading. Apart altogether from the fact that they represent the written views of many experts in manufacturing industry, and, as such, merit consideration, they give a bird's-eye view of conditions that will, undoubtedly, prove helpful in enabling manufacturers to map out plans for 1922.

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Conditions in the Metal Industries

Working on Reduced Basis

By Robert Hobson.
President, The Steel Co. of Canada, Limited, Hamilton

THERE has been no difficulty in getting a supply of raw materials, such as ore and coal. The quality has been all right and prices have been lower than last year. Producers of coal and ore this year have made no money. Delivery prices will not be lower until freight rates come down.

Iron and steel wages have been reduced to an extent much greater than in the majority of other businesses. The reduction has amounted to about 35%. There has been no difficulty in securing labor and our men realized the necessity of reductions being made and the efficiency has not decreased, but on the contrary, has improved.

Export business in our lines has been greatly diminished. We have been working on about a 60% basis for domestic business.

Prices have been largely reduced. The serious deficits as shown from quarter to quarter by many of the large steel companies in the United States, who publish their earnings, disclose the fact that they have been selling below cost of production.

Excessive freight rates are retarding business. Unreasonable demands of labor in certain lines have resulted in many building operations being held up. Economy is being practiced by the federal and provincial governments, also by the municipalities so that taxes may be reduced. The large amount going into government and municipal bonds is making it more difficult every day to secure mortgage money for building purposes. Economy, production and efficiency are words that we have heard on all sides, and they must continue to be used and emphasized.

Economy, production and efficiency practiced will show results in 1922 and we must pray that the farmers may have better crops next year.

Deflation has been Completed

By W. C. Franz
Algoma Steel Corporation Limited, Sault Ste. Marie

MARKET conditions during 1921 in respect to raw materials have been more favorable than for a number of years past. Prices have been lower and deliveries obtainable on short notice, this due principally to the decreased demand and improved transportation facilities. We think a large proportion of the raw materials used in the iron and steel business have reached bottom prices and that conditions in this respect are entirely satisfactory, so that we do not expect much of a change in prices in the near future.

Our experience has been that labor has been quite reasonable and has shown increased efficiency to such an extent that production has increased, resulting in lower costs. Wages have been reduced, and, we feel, are now about where they may be expected to remain for another twelve months.

During the past year market conditions for our products have not been at all satisfactory, but we have noticed in the past few months some improvement and feel there will likely be further improvement in the year 1922, but we do not anticipate any unusually large market for iron and steel during the coming year.

We feel that deflation, so far as prices on finished products are concerned, has been completed because of the fact that most steel products during the past year have been sold at below cost of production, and this condition still exists. Only a decided improvement in demand will bring an increase in prices of finished products.

In the iron and steel business freight rates represent a very large item in the cost of production, and we think that a reasonable decrease in freight rates is one of the most pressing needs of the industry and is bound to stimulate business in general.

My opinion is that so far as the iron and steel business is concerned the worst has been reached. If it were possible for conditions to get worse, the industry might as well stop altogether. However, there is no doubt in my mind that improvement has started already, and that special effort on the part of everyone to get the cost of production down is going to help in this industry the same as in all others.

Market for Engines and Boilers

By R. O. McCulloch
The Goldie & McCulloch Co., Limited, Galt

THERE has been an ample supply of raw materials we use. The quality has been uniformly good and prices considerably lower than in 1920. I do not think, however, that they have yet reached bottom. Labour has been fairly well employed considering conditions. Wages have been reduced on an average of about 20% and the general efficiency of labour has materially increased. In my opinion it is now nearly normal in our line.

The market for our products has materially contracted during the year. It was very good in 1920 and many orders were carried over from that year into the early months of 1921 but it has been gradually getting quieter all the time. There has been no industrial building and operating industries have been getting along without new equipment. The market for boilers and engines, consequently, has been dull. There has been some government and municipal business in pumps and also a fair demand for vaults and safes.

In regard to the outlook for 1922 my opinion is that while the worst is over I do not look for any material improvement until the latter part of 1922 or the spring of 1923.

Owing to the reduced prices of all grain and the change in the grading due to wet harvesting weather in the West, the purchasing power of the West has been very materially reduced and there is not much prospect of business originating in that section of Canada. Deflation has not yet been completed in some lines and, while manufacturers and wholesalers have materially reduced their prices, retailers have not yet got in line. A further deflation in wages and rents is also necessary

Our transportation is much too costly. There is a substantial shortage of houses in almost every municipality and many houses and commercial buildings will be erected as soon as the cost of building becomes reasonable. Increased efficiency in the building trades and reduced freight rates would do much to start business back to normal. I do not think, however, that we can expect improvement for many months yet. While our underlying conditions are sound we must continue to economize in all things and with a good harvest next fall and deflation completed the turn should come and prosperity again prevail.

Improvement by About March

By T. R. Deacon.
The Manitoba Bridge & Iron Works, Limited, Winnipeg

THE condition with us in the iron and steel business in raw materials has been practically the same as with every other company in Canada during practically the whole of 1921. Generally speaking there has been an abundant supply; the quality has been as good as usual and prices have been steadily downward, the decrease in the price of steel at the mills being about 60%, but the tremendous advances in freight rates counterbalance that to a considerable extent, and the same is true of pig iron, which owing to the high freight rates is still very high where there is a long haul. It is at the present time more than 50% higher than the same quality of pig iron cost laid down at Winnipeg in 1913 or 1914. I think at the points of production, both iron and steel are pretty near the bottom, but there will be a further reduction in freight rates all over the American continent, which will reduce the cost to the consumer and manufacturer.

There has been for the last nine months plenty of labor available, and wages have been reduced on an average of about 15%. So far as our shops are concerned, labor for the past year has been highly efficient, never more so.

As our markets are practically confined to that portion of Western Canada between the head of the Lakes and the summit of the Mountains, there has been little change, but, due to the fact that after there being every promise of one of the greatest crops ever produced on the prairies, most of the territory south of the Canadian Pacific line was struck by a hot wave and a severe drought which reduced the crop in many cases to probably 40% of what was expected. The purchasing power of our area was correspondingly reduced and business has suffered accordingly. However, it is said that a larger area has been plowed this fall than ever before, and the general tone of the country is far from one of despondency, although I fear there will not be much improvement in demand for goods until probably March.

Prices have been steadily downward but I do not see how they can go any lower, unless there is a considerable further reduction in wages, as there is no other item left on which reduction can be made, except it be freight rates, and that also is a matter of wages. I think that deflation has pretty nearly been completed.

There can be no doubt in any man's mind who is engaged in business, particularly in the West, that the excessive freight rates have contributed to an enormous extent in preventing the undertaking of any work of any magnitude which could be postponed. The recent cut of 10% after the grain crop has practically all been moved, is too small to seriously affect the situation.

I think it is quite impossible for any man to predict with confidence what will be the development in 1922. I do not think that things can get much worse, and that from about next March there will be a steady improvement. I have confidence that if the Armaments Conference now sitting at Washington results in forming an agreement to reduce the size and cost of navies and armaments, and a united expression of determination by the Great Powers to prevent War, that the psychological effect produced on the commercial world will be very great. Its whole tendency will be towards the revival of confidence and restoration of credit, and will be the beginning of a great impulse towards the restoration of natural conditions throughout the world. Canada, which has stood the stress and shock of the collapse of the world so well, will be among the first to profit by the return of an era of prosperity.

Prices in Stable Position

By Wm. R. Yendall

Richards-Wilcox Canadian Co., Limited, London

IT is our opinion that the reaction in trade is practically over in metal-working lines. We do not look for much, if any decline from present levels in steel and iron, and, where prices of finished goods have been adjusted to present replacement values, as in our case, we believe prices are now in a fairly stable position.

Factory wages have declined during the past year, and if wages in the building trades are reduced proportionately, we shall undoubtedly see a good building campaign next spring. Money is plentiful and interest rates are coming down rapidly, which is, after all, the first condition of a forward movement. There are a few items which still remain unadjusted to present conditions, notably, railroad wages and freight rates, advertising, paper and a few others but if these things can be straightened out, as they probably will be within the next sixty or ninety days, we shall have a better year in 1922 than in 1921.

Gradual Improvement Anticipated

By J. R. Duncan

Vulcan Iron Works, Limited, Vancouver

RAW materials have been easily procurable and prices have reached practically pre-war standards. I think the price of steel will fluctuate around $1.50 per 100 lb. Pittsburg, for sometime to come: the variation I would say would not be more than 15 cents per 100-lb. either way.

We have had a plentiful supply of labor and find the men who are fortunate enough to have employment, are content to submit to conditions within reason. We have cut about 30% during the year, and I am satisfied that labor is prepared to submit to further reductions, as it is made apparent to them that this assists materially to generally reduce the cost of living. I believe reductions of probably 20% will yet take place before the bottom is reached. We have found our labor extremely efficient. Our volume is not so large as 1920. We had a decided slowing down in the months of August, September and October, but our output rose to about 60% in November and 90% in December, and we have about three months' work ahead of us on a 75% basis.

Prices have been low on finished products, and we do not think the bottom has been reached. I decidedly say, No! the process of deflation has not yet been completed.

Manufacturing conditions would be greatly improved in British Columbia if we could only get, what we consider, equitable treatment in the way of freight rates. We are putting up a big fight with the Railway Commission, and if justice prevails, the efforts of the Canadian Manufacturers' and other Associations should get a favorable ruling. The drop in freight rates from the Eastern Seaboard and the Old Country, via Panama Canal, will materially assist us. The railwaymen as a body, do not seem to appreciate how adversely their refusal to accept lower wages affects the interest of their principals, which of course, reflects upon them in lack of employment and increased cost of living.

I have never sent you a pessimistic message, and do not propose to start now, because I really think the worst is over and that a gradual improvement of conditions will set in. The fact that some of the large corporations have decided on development work inspires confidence, and it behooves everybody in a position to do so, to accept their lead, so that in the aggregate a general improvement would prevail.

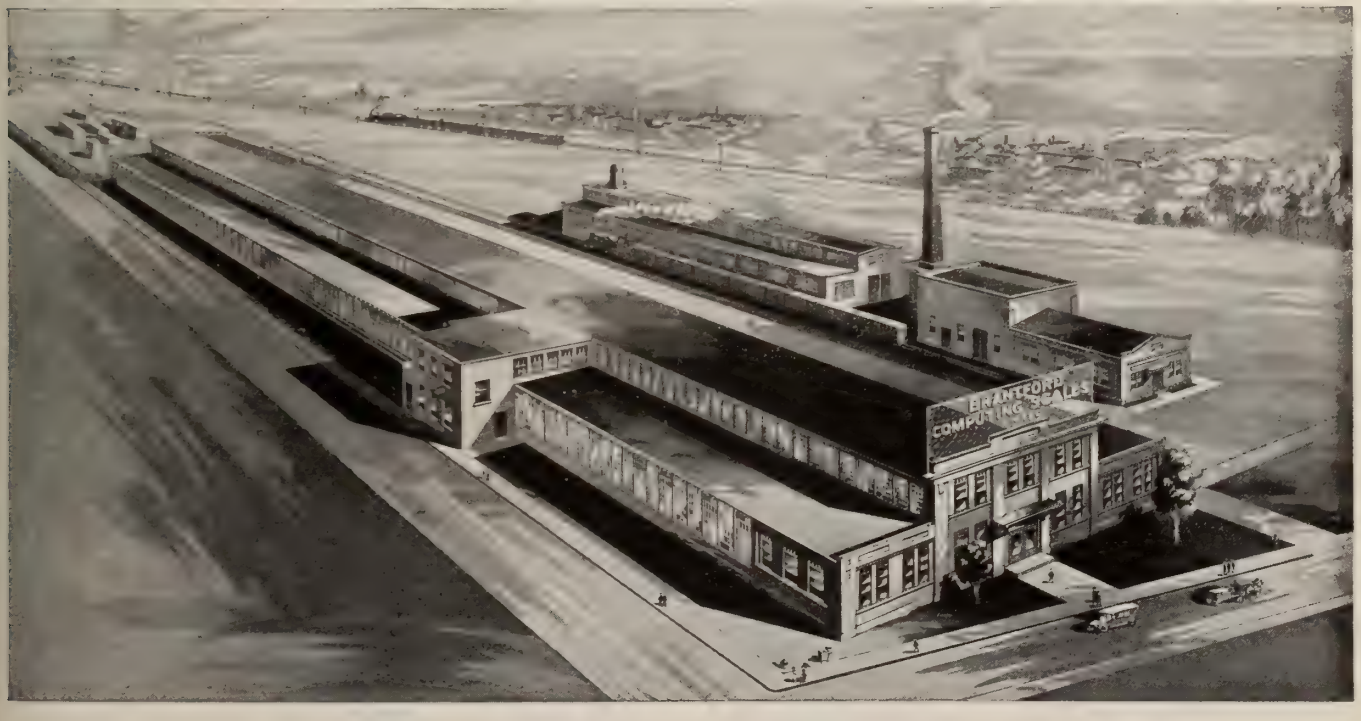
The Metal Market

By G. F. Allen

Hoyt Metal Company, Toronto

SUPPLY of raw materials is apparently unlimited, and in many instances there is over production. The quality is fully up to pre-War standard. Prices of the various metals we use, comparatively speaking, are as follows: Copper is about the same as in 1913; Tin is about twenty-five per cent lower; Lead is about ten per cent. higher; Zinc is about five per cent higher; Antimony is about twelve per cent. lower. You can see from the combined averages of these metals that the market is lower than in 1913. When we take into consideration the excise tax we have to pay and New York exchange, prices compare very favorably and would check, we believe, lower all round.

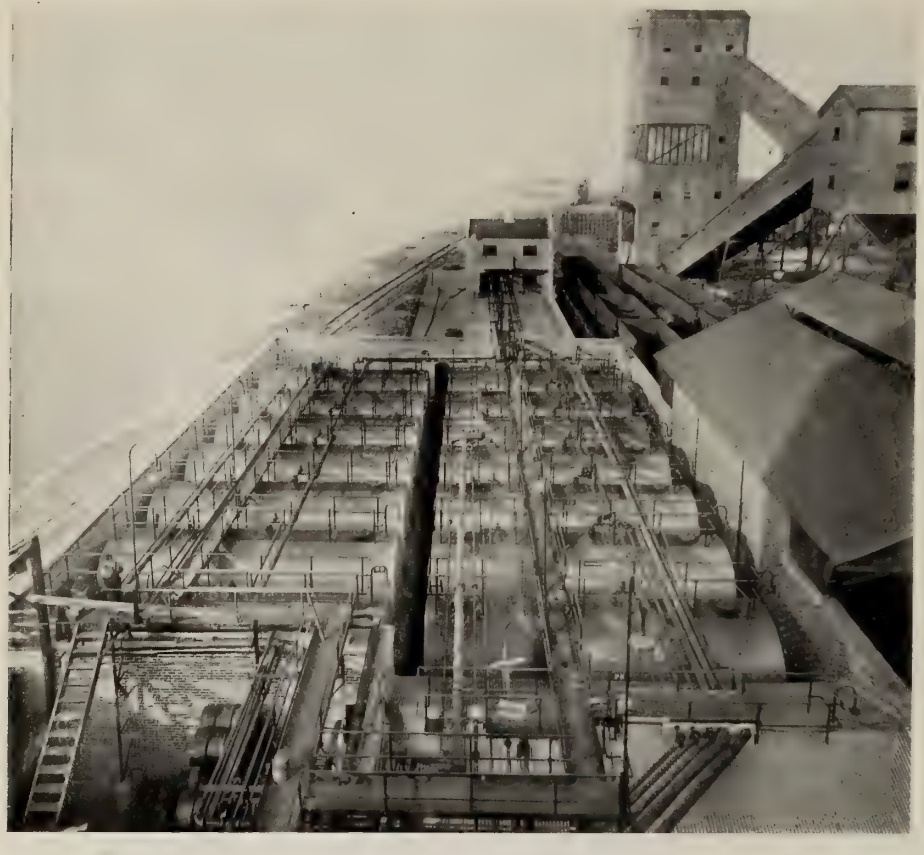
INDUSTRIAL DEVELOPMENTS OF 1921 ILLUSTRATED



Large plant taken over by Brantford Computing Scales, Limited

Early in the year this company took possession of the Ker & Goodwin plant in West Brantford, consisting of building, 100x360 feet, which they remodelled and enlarged for the purposes of their industry. This company started operations in January, 1912, in a small plant on Dalhousie Street, Brantford. They erected a new plant in 1914 containing 21,000 sq. feet of floor space, and now are occupying a plant with 46,000 sq. feet of space, showing a 33-fold expansion of capacity in eight years. They manufacture meat slicers, cheese cutters and scales.

INDUSTRIAL DEVELOPMENTS OF 1921 ILLUSTRATED



New Benzol Plant at Hamilton

This is a view of the storage tanks connected with the benzol plant installed by the Steel Company of Canada, Limited, last year. Benzol is one of the hydro carbon compounds which, during the dry distillation of coal, escapes from the ovens with the gas evolved. It is sold to a number of motor fuel distributors, who mix it fifty-fifty with gasoline and produce "Steline", a most efficient motor fuel.

In 1913 we were paying for ordinary labor 22 to 22½ cents per hour; in extreme cases 25 cents per hour. To-day our labor is costing us 45 cents per hour. We do not notice much difference in efficiency.

The tendency of the metal market for the last twelve months has been gradually downward, and, we believe the bottom has been reached. We cannot see anything but a considerable advance in soft metals, with possibly the exception of lead. There may be a slight advance owing to spring buying.

The only effect that freight rates would have on this company would be to act as a restriction on close margin material, having a tendency to localize business.

From our view point the outlook for this year, we cannot help but feel, is bound to be upward. This view is based on the talks and discussions we have had with our various large customers.

Hopeful for the New Year

By H. J. Waddie

The Canadian Drawn Steel Co., Ltd., Hamilton

DURING the year just closing, our average price of raw material has been about 25% lower than the previous year. The supply has been prompt and the quality good.

The labor condition is the one condition which is the cause for worry as the laborer says he cannot live on less wages at the present cost of living and apparently the present cost of living cannot come down without bringing down wages. We ourselves have reduced the price of our product in the past twelve months 40%; during the same time we have reduced wages 20% and after this reduction our average wages are at least 50% higher than two or three years ago.

The lack of orders, or rather the small quantities being ordered at one time has gone very badly against the efficiency of labor, because the laborers instinctively know there is not much business coming along and they naturally make it last.

As regards the trend of prices, I believe that, if they are not at rock bottom, they are within 10% of it, as otherwise in our line of business I do not see how anyone can carry on.

On the question of freight rates we cannot help considering Canadian freight rates too high. Where we import our material, we have the freight rate from Pittsburgh to pay; if we do not import our material, the Canadian mills charge the freight rate anyway and then we have the Canadian rate on top of it. There is one glaring instance where the freight rate on our material from Hamilton to Windsor is higher than from Pittsburgh to Windsor, giving this border town full advantage of importation.

As to the outlook, with our business the agricultural implement people form a very important link and, as they are shut down, we are affected very badly. It depends upon their starting up what our prospects for 1922 will be. However, we have found in the last three months that we have received no specifications of any size but we have received a number of them, showing that everybody is buying a little and the total specifications have increased slightly each month since July. We are certainly hopeful of a good opening up in January and February.

Gradual Recovery Anticipated

By F. A. Bapty

Deloro Smelting & Refining Co., Ltd., Deloro

THERE is now no difficulty whatever in obtaining all raw materials required. As is usual, when supply exceeds demand, quality improves. Prices on many materials are now quite a bit lower than a year ago.

Wages have not been reduced to any appreciable extent, but there has been a marked increase in efficiency of labor.

Markets still continue very quiet. A few enquiries received would seem to indicate that there may possibly be a slight revival in trade, but we consider it will be quite modest.

In some lines we think prices have not yet reached bottom, but they are considerably nearer value than a year ago.

Heavy freight rates are no doubt a deterring influence and it would appear that considerable reductions could be made in freight rates and made up for by increasing the efficiency of present freight service.

As to the outlook for 1922, conditions have been so very bad that we feel that bottom has been reached and that from now on there should be gradual recovery. Present business is much healthier and the tendency in our opinion is towards a slow and sure recovery.

Believes Tide has Turned

By H. P. Hubbard

E. C. Atkins & Company, Hamilton

ON our principal raw materials, viz, high grade crucible sheet steel, there has been very little recession in price. There has been, however, material reduction in rates of labour and workmen appreciate and value their jobs a lot more than in the previous few years.

The buyer has been very cautious, particularly in the past six months, and we, in common with others in our line, and with United States competition, have had to lower prices, so that the present ruling prices will have to be maintained, unless there is further substantial reduction in our raw material and labour.

We are inclined to be optimistic that "the tide has turned".

Structural Steel

By C. H. Scheman

Horton Steel Works, Limited, Bridgeburg

OUR raw materials consist of steel plates and shapes. In view of the decreased demand for these products, the mills have been able to fill orders promptly. Prices are reduced to approximately 41% from the prices of last year.

We have employed about three-quarters as many men this year as last year. Wages have been reduced about 10%. Labor has been considerably more efficient.

The demand for steel structures has been very much reduced during the past year. Our contracts for the year were considerably lower than for the previous year. We look for increased interest next year provided the result of the election does not have a bad effect.

The prices of our finished products have been reduced to conform to the cost of raw materials and labor, and we believe that there will be no further marked decrease.

There is no question but that high freight rates are retarding business. In the fabricated steel business, the freight is a very large item when the freight from the mill to the shop and from the shop to destination is taken into account. In our opinion, a marked reduction in freight rates will be a decided influence in stimulating business.

We do not see how conditions could do other than improve. It hardly seems conceivable that they could become worse. We believe that the public has gained confidence in the business situation, and that they will be ready to go ahead with municipal and other improvements in the coming year.

Stocks Very Much Reduced

By R. C. Douglas
Norton Company of Canada, Limited, Hamilton

THE price of raw material has been reduced to some extent. There is plenty of such material available and the quality is equal to what we have always been getting.

There is, of course, much more labor available now than at this time last year. Wages have come down to some extent and we believe that the efficiency has been maintained if not increased, under the present conditions.

The purchasing power of the market has been quite restricted during the past year both for domestic and export business. An improvement may be noted from time to time, but it does not seem to be consistent.

Prices have been reduced during the past year, and any further changes will, of course, depend on the conditions prevailing with general prices of commodities used.

Freight rates is one of the items that must be reduced before any extensive readjustment can take place in connection with general manufacturing conditions, no matter to what industry you may refer, as we are all affected considerably.

We feel that conditions should improve shortly after the first of the year as we think that the stocks of various materials in the hands of the user are very much reduced if not altogether exhausted. Under the present conditions they are simply buying from hand to mouth and as confidence is regained we expect general business will expand and in this manner the general market will develop.

Receiving Favorable Enquiries

By E. R. Jacob
Canadian Metal Window & Steel Products, Ltd., Toronto

SUPPLIES of our raw materials are very much easier to get, the quality is improving, and there is an approximate reduction of 25% over a year ago.

Labour conditions are very much easier than this time last year. We could get help a good bit cheaper than last year, if our business warranted same; but with the present business condition, we are not employing more than one-third of the number of men we had a year ago, and we have kept the most efficient and are paying them last year's rates.

The first four months of 1921 were very slow with a slight improvement round August and a very pronounced improvement for October and November. By the number of enquiries we have had for our products, we think December will also be good.

The trend of prices has, undoubtedly, been downward, and as far as our product is concerned, we have touched the bottom.

Undoubtedly, if we had lower freight rates, it would help quite a bit—especially on jobs in the Maritime Provinces and the Western Provinces, as, in some cases, the cost of freight equals the cost of the materials.

Our opinion of the outlook for 1922 is that it will be good. The number of enquiries we are receiving, and have received this last two months, leads us to believe that there will be a general improvement in industrial building in the coming year.

Improvement by the Fall

By F. Smith
The E. Long Manufacturing Co., Limited, Orillia

WE have found during the last year that raw materials have been comparatively easy to secure and the quality has been much better than the year previous. Prices have also been more reasonable and, while we do not think the bottom has been quite reached yet, still we think it is very near rock bottom.

Sales for our goods began to fall off about the beginning of 1921 and they have slowly decreased and are decreasing at the present time. While we hope and really expect by March 1st, next, that the bottom will be reached, we do not look for any immediate improvement, as the best season for our product starts in February and sometimes the latter part of January. A slightly improved temporary condition might arrive about that time, but we believe it will fall away after June or July until January 1923.

Our prices have decreased during the year from 25 to 30% according to the class or different classes of machinery which we manufacture. While we cannot reduce our prices any more at the present time, still we do not believe that they have reached rock bottom. We believe that it will be necessary to reduce our price still further about 10% which no doubt will mean rock bottom.

It is our opinion that the last six months of 1922 will show a great improvement over the first six months of the year which we are just now entering on. Canada must go ahead and, as there is a very small stock of most commodities which we must have to make our country prosperous, as soon as business begins to move there will be a general demand for nearly all articles which the Canadian manufacturer has to offer to the people.

Must be an Improvement

By M. R. Meldrum
The Herbert Morris Crane & Hoist Company, Limited, Niagara Falls

IT is now fourteen months since the first sign of a break-up in the boom occurred, and those fourteen months represent a very trying period for Canadian industry. Once again we have gone through the story of the survival of the fittest, and some of the weaker organizations have been obliged to withdraw from the struggle.

In the long run, this will undoubtedly be for the benefit of the country as a whole. An inefficient organization only exists at the expense of the community. Those of us who survive until the spring of 1922 will have learned thoroughly the lessons of hard times; we shall have got rid of superfluous weight and we shall be in such good fighting trim that nothing need come amiss to us.

INDUSTRIAL DEVELOPMENTS OF 1921 ILLUSTRATED



New Benzol Plant at Hamilton

In this illustration are shown the Scrubbing Towers, which are used in separating the benzol from the gas in which it was previously carried. The gas passes through the towers and is brought into contact with absorbing oil, which is introduced at the top. This oil absorbs the benzol vapors at a low temperature and later releases them when heated to a high temperature, the scrubbing efficiency reaching 100 per cent, so that the gas is completely drained of its benzol contents during the process.

While not attempting to forecast the future, ordinary common sense suggests that there must be an improvement in industrial conditions during the coming year. People must eat if they are to live. They must also have clothing and other necessaries of life. The stocks held by merchants were undoubtedly large, but they are gradually being depleted and they must be replaced. One of the most encouraging signs of improvement is the increase reported from all sources in building operations. There is still a great shortage of homes, and the building of these will call for great quantities of material, lumber, cement, hardware and glass. These materials cannot be supplied without employing labor, and before many months of 1922 are past, it is reasonable to suppose that unemployment figures will be very greatly reduced.

We hear much talk of the burden of taxation of an over expanded railroad system, of government mismanagement and so on, but a review of the conditions existing in all the other countries of the world should convince us that Canadians have the least cause for complaint and that consequently Canada should be the first to show the way to stability confidence and prosperity.

Sales Below Normal

By C. A. Collins
Canadian Furnace Co., Limited, Port Colborne

THE market for raw materials is very easy. The supply is ample, quality good and the prices of fuel, one of our principal raw materials, we believe to be considerably below cost of production. The high freight rates however have tended to keep the delivered price considerably above pre-war levels and relief in this direction would be of benefit. Iron ore, our other principal raw material was reduced $1.00 per ton below the 1920 price and will undoubtedly be reduced in 1922 as much more.

Inasmuch as we have not been operating since April we cannot intelligently discuss the labor question except that we know in a general way that labor is, in our locality, good and they are working for wages approximately sixty to seventy-five per cent. of those in effect a year ago.

When we closed down we had a considerable tonnage of pig iron which has been marketed at about a uniform rate since April. The demand was a little heavier about a month ago than it was during the previous months, but has fallen off again, undoubtedly due to the approach of the holidays and the usual inventory period.

The prices of our product have steadily declined until they are now not only below our present cost of production but also lower than our prospective cost unless it is very materially reduced by freight rate reductions.

Freight rates comprise a very large part of our cost and naturally we would expect to benefit from any reductions. Labor, we believe to have declined to about as low a point as it will be in the near future, and as the price of our raw material is made up largely of labor and freight rates, adjustment in the latter seems to be about the only relief we can expect. Beside the high railroad wages, freight rates and coal mining wages, we do not think there are any adverse factors unless it is a possibility of a reduction in tariff, which would of course be disastrous to our business.

We believe that the volume of business in 1922 will show an improvement over 1921 but we do not look for much, if any, profit during that period. There are no particular factors which lead us to make this statement except that the use of our commodity has been during the past year so far below normal that we expect to see some improvement regardless of general business conditions.

Tendencies Towards Improvements

By W. F. Angus
Canadian Car & Foundry Co., Limited, Montreal

THE supply, quality and prices of those raw materials immediately entering into manufacture in our particular trade, such as, for example, steel and lumber are on a more favorable basis than a year ago. We do not consider, however, that the bottom has been reached in view of possible further labor cuts, and greater reduction in overhead expenses, so that we consider the mills should be able to quote still lower prices when conditions justify.

During the whole of 1921 labor available has been considerably in excess of our requirements and no difficulty has been experienced at any of our plants in procuring an abundance of satisfactory labor. This condition still exists and from present indications will exist for some time to come.

Wages have been reduced in our various plants very considerably, the percentage of reduction running from about twelve per cent. to as high as thirty per cent. but taking all trades and occupations, would probably average around fifteen to eighteen per cent. for last year.

The efficiency of labor has materially increased as the men seem more conscientious in their work and give every indication of an endeavor to increase their efficiency and give value received for the wages paid.

The market for our products was quite active a year ago, but became stagnant early in the new year and there has been very little improvement in demand up to the present time. Our principal customers are the Canadian railroads and they are buying at the present time only necessary requirements.

We do not consider that the process of deflation has been completed, as, although raw materials prices and labor costs have decreased, there is still considerable to be done in connection with overhead expenses and, as already stated, lower labor costs will be possible as soon as reduction in the cost of living justifies.

Reduction in freight rates will undoubtedly help the manufacturer, as the high cost of handling materials has been a serious item for some time in the cost of production, and the improvement in this respect will also favorably affect overhead expense material as well as the delivered cost of finished product. One of the worst items of overhead which is adversely affecting industry is that of taxes, federal, provincial as well as municipal, and economies have got to be obtained in these, and other fixed charges of a similar nature, to allow the manufacturer to show costs which will justify increased business.

Although we do not consider that the bottom has been reached, we think that the worst is over and that, in the immediate future, signs of improvement in trade should be seen. The principal progress made towards the restoration of normal conditions has been in the decreased prices of raw materials, and a hopeful sign is the fact that the majority of manufacturers have absorbed their inventory losses and have reduced the quantities of such inventories to a conservative figure, while their obligations in the form of bank loans and accounts payable have also been decreased, if not entirely liquidated, so that the liquid position in the majority of cases is very much improved.

Hopeful Signs on Horizon

By D. W. Coe
Canadian Mead-Morrison Co., Limited, Montreal

WHILE there is very little that can actually be seen on the horizon to indicate any material increase in industrial activity for 1922, there is a feeling among manufacturers and business men generally that conditions will improve. This feeling is strengthened by an examination of business charts from which it appears that we have already reached the low point and that a slight improvement is apparent. This belief is further strengthened by our knowledge that the purchase of new construction, equipment and supplies has been deferred up to a point where it cannot be withheld much longer.

There has been a noticeable improvement in some of the conditions governing the manufacturing industry, but some adverse factors must still be adjusted before there is any rapid movement towards activity and prosperity.

One hopeful sign already noticed is the increased efficiency of labor, and I might frankly go further and state that this improvement extends through all departments.

The recent small reduction in freight rates is also a hopeful sign, and with the ironing off of the rest of the high peaks that affect living costs there will undoubtedly be a further price reduction in many lines, and a corresponding increase in the purchasing power of the dollar. Unfortunately, in the large manufacturing centres the landlords seem loath to decrease their rentals and this is causing very great hardship where labor is working on part time. There must be a considerable reduction in rentals which are still at the high peak and out of all proportion to the general decrease in the cost of materials and labor.

Tendency Towards Betterment

By O. C. Sylvester
Mathews Gravity Carrier Co., Limited, Port Hope

THE matter of obtaining materials from manufacturer's has been the least of our troubles. Deliveries have been prompt; quality is good and prices more nearly normal than last year,—in fact all that we can expect under the circumstances. By this we mean that materials manufactured last March still bear the stamp of higher labor cost and must be consumed before the materials of today's manufacture are placed upon the market. This necessarily holds prices up, as all are not ready to make prices based upon cost of replacement. This, however, should be done by everyone and to the writer's mind would not work as a hardship, and for all time would make a basis upon which new prices would rest at a settled level.

The dearth of orders the past eight months has forced retrenchment in every conceivable manner, and it is needless to say that labor has been obliged to stand its portion of it. It would be unfair, of course, that it should stand more than its share, yet in some cases manufacturers have been obliged to reduce to an extent that only left a nucleus of their organization, from which a working organization could be built upon short notice as soon as orders were obtained. To our minds there is greater unemployment than in 1920, yet the present tendency indicates a betterment in this regard. In comparison with last year's wages, the highest grades are lowered 20%, the middle class 15%, and common labor 10%.

The market for finished products this past year does not compare favorably with that of 1920; at least the first part of the year did not, but the tendency toward betterment was apparent in the last few months, which we take is an augury of a return to more nearly normal markets.

Some months since we noted in a circular of the Canadian Manufacturers Association that many of its members were readjusting their selling prices upon a basis of cost of replacement. It was apparent that if all would follow this practice and take their losses upon the materials purchased at high cost, it would speed up re-adjustment as nothing else would, therefore, our prices were readjusted upon that basis and we have not regretted our action in so doing.

To our minds there is little doubt but that the coming year will be some improvement upon the closing one, but distrust has not yet been effaced and will not be entirely so until the test of a greater priod of time has elapsed.

Future Looks Somewhat Brighter

By C. H. Waterous
Waterous Engine Company, Limited

THE condition of the market for our raw materials, as regards supply, quality, and price, has been better and more favorable than it was a year ago. So far as supply is concerned, it would seem as though there was plenty for all requirements. As to prices, in some lines, the price has probably reached the bottom; but in many lines prices will, no doubt, continue to recede somewhat; particularly this would be the case where transportation cuts some figure. I have no doubt the cost of transportation will have to be lowered.

Labor is more plentiful, and wages have been decreased from 10 to 20%.

In the early part of the year, the demand for our machinery was quite satisfactory; for the last half of the year, there has practically been no demand, purchasers having given up the notion entirely of buying. We are receiving more inquiries now than we have for some time, and we believe the future looks somewhat brighter than the past.

Prices in our line of manufacture have been steadily going downward: it is impossible to say whether they have reached the bottom or not—that depends on whether wages, the raw material we buy, and transportation go any farther. The excessive freight and passenger rates are, no doubt, having an adverse effect on business; in fact, anything, as you know, that means extra cost, has a deterrent effect. The present very high taxes are a serious matter; this may be necessary, but there should be a readjustment of these on an equitable basis that would encourage capital and industry rather than discourage it: and this, in our opinion, would be a very great help.

The outlook for 1922 seems to be better than the latter part of 1921, and we believe that the worst is over: that is, supposing the new government will not enact disturbing legislation.

Sheet Metal Products

How the Situation looks to a Prominent Manufacturer of this line

THE condition of the market for our raw materials during the past year has been fair. About July 1920, we made various contracts with the sheet steel mills. These contracts were not filled during that year, putting us to considerable inconvenience. Conditions materially changed after the first of the year, and the mills, which up to that time had found themselves with a large tonnage of unfilled orders on their books, discovered that the orders were becoming few and far between. They took the opportunity of filling all belated orders, with the result that we were swamped with material. This condition became less acute as months went on and at present we find that orders placed with the mills are filled fairly promptly. Quality apparently is as good as ever, and the prices have been declining from the first of the year up to within very recently, when a small increase in price was made which, in so far as the sheet steel mills are concerned, seemed to result in increased orders.

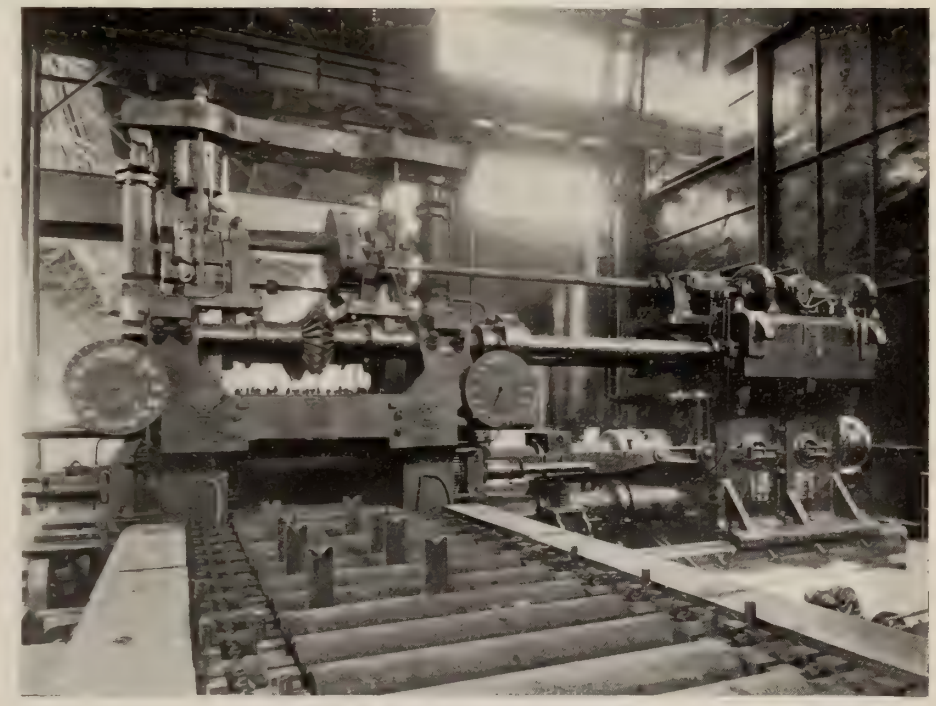
This experience is valuable in showing that consumers will not buy on a declining market, but when a tendency is shown towards higher prices the consumer jumps in and buys according to his needs. We do not believe that the price of steel commodities has as yet reached the bottom, and look for still further recessions.

In so far as we are concerned, employment during the year 1921 has been fairly satisfactory. Wages have come down to a considerable extent but are not yet normal. We had absolutely no trouble in decreasing the wages of our men. It was pointed out to them that while they were receiving less than in the past, still what they were receiving would purchase considerably more than previously, and our class of labor is such that an argument of this kind would appeal to their reasoning powers. Efficiency is not yet normal, though there has been a marked improvement during the year, which improvement is still continuing.

The diversity of our line of products is such that it is rather difficult for us to deal with the market situation intelligently. A portion of our products are marketed direct to the farmers of Ontario, the Maritime Provinces, and the West. This class of our business is considerably larger than a year ago; prices are very much lower, and it looks to us as though next year this business should be still further increased. Building materials

INDUSTRIAL DEVELOPMENTS OF 1921 ILLUSTRATED





Universal Plate Mill at Hamilton

This important addition to the plant of Dominion Foundries and Steel, Limited, was begun in 1920 and opened early in 1921. It is known to the trade as a 27″x40″x72″ Universal plate mill, having rolls 27″ in diameter and 72″ long and rolling universal plate 40″ wide and sheaved plate 66″ wide. It is the only mill of its kind in Canada. The cost was in the neighborhood of $1,500,000. The upper photograph shows the amount table, flatteners, cold and hot shears; the lower shows the entering side of the mill as seen from the operating stand. The new mill has trebled the output.

have not been selling as well as formerly, owing to the decreased building operations throughout the country. Sheet metal parts for motor cars were selling very slowly at the first of the year, but there has been a most marked improvement in the last few months, and,taking everything into consideration, we are very optimistic indeed as to the outlook for business during the coming year. We do not expect any sudden increase, but believe that the demand for our products will steadily improve.

Prices of our finished products during the past year have steadily decreased. Any further decrease cannot take place unless the price of our raw materials is considerably lower. It is quite possible that steel, which is our only raw material, will come down during the coming year and, if this comes about, it is probable that we will be able to give a further slight reduction. We do not believe that wages can be reduced to any extent, though no doubt efficiency will improve, which will make it possible to produce our goods a little cheaper. On the whole, we would consider that the process of deflation is practically completed, and any further reduction will not amount to a great deal.

The present high freight rates undoubtedly have a retarding effect on industry, and a decrease of such rates would be bound to have a tendency to encourage business. If we could instill into the minds of the consuming public that prices now are practically as low as they will be for sometime, and could create a feeling of optimism instead of pessimism, which seems to have every farmer in its grip, we would have no fear whatever of the future.

Business Shows Improvement

By W. Gordon

The Steel Trough & Machine Co., Ltd., Tweed

PRICES of our raw material especially sheet steel at the present time are as low as they have been for some years, but of course they are somewhat higher than pre-war prices. However it appears to us that they are as low as they can go considering the wages that are being paid at the present time.

As far as we are concerned ourselves, we are not employing as many men at this time of the year as we were last year. On the other hand we have made very slight reduction in wages, not over 10%. Labor efficiency is much higher than it was during the war.

In the first half of the year demand was good for our product but during the third quarter demand was not so great. However, we find that business is improving slightly and everything points to business being very much better during 1922. We believe the great obstacle in getting back to normal is the high wages being paid and we think, if wages can be adjusted to a reasonable basis, business during 1922 will be good.

Of course another item that enters into the depression is the high freight rate which we think is affecting industry adversely. We think this a very serious matter and unless it can be reduced before spring will have a tendency to depress business.

Improvement being Delayed

By L. A. Paddock

The Canadian Bridge Co., Limited, Walkerville

RAW materials are plentiful, and of same quality as before the war, and prices are about 20% above pre-war prices. We do not look for any considerable drop in prices. Labor is, of course, plentiful, and can be hired for whatever you wish to pay. The difficulty is to pay them enough to live on. Efficiency is the same as before the war.

We have very few inquiries at the present time, and have been suffering from a dearth of inquiries throughout the entire year. There is no improvement up to the present time. Prices are still receding, and will probably continue to do so until there is sufficient business to occupy the various concerns in our line.

Freight rates are shutting us out from a considerable amount of business, also causing the buying public to hesitate in placing orders. For instance, the freight on a carload of steel from Walkerville to Edmonton, Alberta, is greatly in excess of the total manufacturing cost.

As for the outlook for 1922, there is a small amount of railroad business coming out. We are hopeful that conditions will improve by the spring of 1922, but believe that the lowest ebb in business conditions will not be reached until mid-winter. The tendency of retailers and property owners to help in reducing the cost of living, together with some inclination on the part of the railroads to reduce freight rates, seem to us as the features which will in the end inspire better business conditions.

Many Inquiries Being Received

By G. E. Bell

Dominion Engineering Works, Limited Montreal

OUR raw materials are principally pig iron, steel castings, bronze castings, tubes and plates. The prices for these materials have all decreased very materially during the past year and deliveries have improved.

We are employing only about half the number of men that we employed a year ago, at wages from 20% to 25% lower than last year's. The efficiency of the labor has improved and the supply, of course, is plentiful.

Our principal products are paper machinery and hydraulic turbines. In both of these lines the amount of money involved in single orders is large and the work depends upon our customers being able to finance large undertakings. Business in paper mills has fallen off greatly during the past year, but is now improving and there are good prospects of future business in both lines.

Prices of our finished products have declined perhaps 30%. We do not know if the process of deflation has been completed, but we do not think that prices will decrease very much in the near future, or until wages have been lowered mterially.

Business is improving to some extent. We are receiving a large number of inquiries, some of them being for large undertakings, but most of them are at present very indefinite.

Confidence is Returning

By A. H. Tallman

Tallman Brass & Metal, Limited, Hamilton

MANUFACTURERS have ample stocks of raw materials on hand and can make prompt delivery. Prices on all non-ferrous metals have been lower than in 1920, but are now rising. Quality is good. Bottom in non-ferrous metals has been reached and in our estimation prices will gradually advance to a much higher level, as they have fallen below pre-war levels.

Help is plentiful and labor is inclined to give better service. Wages have come down 10 to 15%. Employees are getting back to pre-war efficiency.

Business was very slow during first nine months. Demand has materially improved the last two months. Prospects bright for a gradual increase in business from now on.

Prices of non-ferrous metals fluctuated to a gradual decline for the first ten months. We consider the bottom has been reached, and as the demand increases, prices will advance.

It is absolutely essential that the farmers' buying power be increased to enable business to get back on its feet again. We believe that the worst is over and that confidence is returning and that as soon as the building trades and railway employees realize that their rates are out of line with other labor, so soon will a revival of business set in. In our estimation these are the two chief factors that are holding up business to-day.

Buying Very Much Reduced

By F. H. Hopkins

The Dominion Wire Rope Co., Limited, Montreal

THE supply of raw materials has been good, with quality satisfactory and prices rather lower; we do not believe the bottom has as yet been reached. We have had no trouble in getting labor; it compares more favorably than last year and wages have come down about 15 per cent.

Buying has been reduced very much over 1920 and has been rather less for the last two months than we have ever before experienced. Selling prices have been reduced materially and they, of course, are governed by the action of raw materials. If there is a reduction in the latter, there will be a reduction in the finished article.

The recent reduction in freight rates will help in distribution but one of our greatest troubles is the more favorable through rates given to other countries for delivery into Canada. These rates are more favorable in proportion to those granted to Canadian manufacturers, which makes a serious handicap.

We believe the worst is just about at hand in our line and we certainly look for and feel that we can reasonably expect better things for 1922.

Business on the Upgrade

By W. E. Demill

The Canada Stoker Company, Limited, Galt

RAW materials have been readily obtained. As to prices, it appears to us that the bottom has not yet been reached.

Wages with us have been lowered to some extent, not a great deal. We have no complaints to make regarding the efficiency of labor.

Markets for our product have been very limited since ours is looked upon by many manufacturers as a luxury, while it is really a necessity. We believe there is an improvement in market conditions generally.

As to prices for the finished product, during the year our prices have been reduced somewhat and at the present time are back to pre-war mounts. We were however, very differently placed to the ordinary run of manufacturers during the war, as we were not able to increase the price of our goods in keeping with the increase of raw materials and wages.

We are looking for improved conditions in 1922 over the year just gone. We are hardly prepared to say whether the worst is over but in our opinion it looks as though we had reached the bottom and were on the upgrade.

Selling Prices Greatly Reduced

By J. O. Thorn

The Metallic Roofing Co., of Canada Limited
Toronto

THERE have been ample supplies of raw materials of satisfactory quality from United States mills and prices have been falling throughout the year. Raw materials have been costing about 25% on the average less than they did last year. We do not think that the bottom has yet been reached, but our impression is that no further reductions will take place for some time.

Labor has been more efficient this year; consequently the cost of production has been somewhat reduced. We have not reduced

wages, but have retained our best men while the inefficient men have been weeded out.

The market for our manufactured products has fallen off this year as compared with last year owing mainly to the decreased buying power of our customers, and the continued high cost of raw material, labor, and freight rates.

Our selling prices have been reduced from time to time during the year, the total reductions being from 30% on some articles to 15% on others. Selling prices are now about as low as it is possible to get them, and further reductions cannot be made until the cost of raw material, labor and transportation is reduced.

The present high freight rates in our opinion have done, and are doing, more than almost anything else to strangle industry in this country. Prior to the war the carload rate on our goods from Toronto to Winnipeg for instance, was 55c. per 100 lbs. It is now $1.14 but it was $1.23½ up to the first of this month, and these high rates make the cost of our goods to the Western farmers and other consumers much more than otherwise would be the case.

The Market for Metals

By W. G. Harris

The Canada Metal Co., Limited, Toronto

CONDITIONS during 1921 have shown a great improvement over 1920. To a large extent, the slump in values took place in 1920, and, in many instances, carried prices below actual value. Now, we believe, declines have not only ceased, but goods are advancing in price—raw materials, such as lead, tin, zinc, and copper all being on the rise. Prices on these lines are now higher and are not likely to decline materially during 1922.

Labor troubles are over in most lines: what labor wants is steady employment Wages have declined from 10 to 20 per cent., according to the class of work.

It has been a buyers' market throughout the year, for, with any quantity of spot goods on hand, much of them bought at prices above present values; and with money not too plentiful, there has been a desire to unload to obtain cash. Buyers, therefore, had things their own way on many lines.

I was born an optimist, and so look forward to good business in 1922.

Building Trades a Barometer

By W. G. Smart

The Smart-Turner Machine Co., Limited, Hamilton

THE market for raw materials has, in the year, been more or less on a down grade. Prices are lower than a year ago but we do not think the bottom has been reached in all lines as yet.

Wages are down from a year ago, but have not reached bottom. In many cases the amount of work in sight for the men is not very much and they are therefore not turning out anything like what they could if it did not appear to them that they might run themselves out of a job.

The market for our product is not much better in one district than another. There is some improvement in demand since last spring, but not very much. Prices have been going down and we have found a good many cases of cutting in some lines. We believe lower prices will maintain in some lines at a later date, but in others we believe we have pretty well reached the bottom.

The writer believes that by spring the worst will be over. We look for a hard winter, and if in the spring labor will accept a proper reduction in wage, business should show a very marked improvement. It always seems to us as though the building trade might be considered at the present time a barometer indicating the chances of business for the whole country. If building trades are down by spring, we believe 1922 will be a good year. If building trades accept only a small reduction as in 1921, the re-adjustment will be put off another year. We do not mean that the building trades are the only ones to come down, but we believe that as they come others will either have done so or will follow very shortly.

Lack of Confidence Depresses

By F. E. Leonard

E. Leonard & Sons, Limited, London

DURING the last half-year, we have had no difficulty in getting boiler tubes and plates and other material required for the manufacture of our standard goods, from the mills. Prior to that time, deliveries were very slow.

We have had no difficulty in securing all the skilled and unskilled help we have required during the last six months. At the present time, we have had to reduce our working hours, owing to lack of business. Our employees have agreed to two reductions in wages during the last year, and our rates are now approximately in line with the average rates published by the Canadian Founders and Metal Trades Association.

Prices have been gradually falling in regard to material for our products during the last twelve months, and, as far as plates are concerned, we do not think that prices can go very much lower under present conditions—certainly no lower as long as present wages and high freight rates continue.

We have made two substantial reductions in the prices of our goods. In the case of boilers, these reductions are greater than the corresponding reductions that have been made in the price of material and labor; and in other lines have practically coincided with the reductions in costs.

As our market is entirely domestic, at the present time there is practically no business to be had. People seem to lack confidence, and not to want to make purchases of any kind.

There is no doubt, whatever, but that the high freight rates, prevailing in Western Canada, have deprived us of a good deal of business we used to have in the western provinces, and which has now gone to the local shops. The same, to some extent, applies to Quebec, and the Maritime Province shipments.

We find it very difficult to make any prediction as to prospects for 1922. The lack of confidence, throughout the whole country, has a very depressing effect on business conditions.

Structural Steel Fabricating

By J. H. McGregor

McGregor & McIntyre, Limited, Toronto

DURING the past year the rolling mills from whom we purchase structural shapes have been able to make very rapid deliveries owing to lessened demand. Prices have decreased about forty per cent. over a year ago and we expect will remain at approximately the same level until Spring when they will stiffen up to a certain extent. A decrease in freight rates in the United States might make a very small decrease from present prices, but this will not be large.

Labor is plentiful. It has only been possible to maintain about 50% of the employment of 1920. Wages are down twenty per cent. and the efficiency is good; better than in 1920 and much better than in 1919.

The market for structural steel during 1921 has not been bright. The railroads have not purchased bridge material to any extent, and all bridge companies have been competing very keenly for such building work as has been let. Although an increased demand for structural steel has not yet been felt, largely due to the season, we predict that 1922 will be much brighter than the present year. Certainly a great many more projects are talked about, this past fall than were discussed a year ago.

Freight rates are still too high. A decrease in these rates would stimulate the industry by lowering the cost of those building materials whose value is largely determined by the cost of haulage, for instance sand and gravel. Labor costs are still far too high, principally in those trades referred to as the building trades. A reduction of from 25% to 35% in these trades would be a greater stimulus than anything else toward building activity.

We believe 1922 will be an improvement over 1921, and will precede a year of great activity in 1923.

Disparities Must Disappear

By J. E. Waterhouse

Engineering and Machine Works of Canada, Limited St Catharines

OUR raw materials consist mainly of pig scrap iron, coke and steel in the form of plates, shapes and bars. There has been no difficulty during 1922 in obtaining promptly all needful supplies of satisfactory quality. Prices have dropped steadily during the year. We feel that pig iron will still go considerably lower but steel at $1.50 base begins to savor of stability.

Wages with us were reduced 12½% just about a year ago, and we reduced a further 10% on the average last August. Our working force has been reduced to a considerable extent. Our men have been contented. They took the two cuts in a reasonable fashion without objection and labor efficiency has increased noticeably with us.

The markets for our line of industry have been only fair throughout the year. There was a considerable improvement in the autumn but it did not last. Prospective business is plentiful but immediate purchasing is absent to a large extent. Except for the disparity in the prices of farm and manufactured products, which presents real obstacles to recovery, the ground has been pretty well cleared during 1921 for a revival of business. This disparity will be adjusted by force of circumstances in due course. For our part we feel that 1922 will witness a steady improvement and as to the longer feature there can of course, be no doubt or misgivings in the minds of Canadians.

Prices of our own products have been steadily reduced during the year to keep step with lower costs.

Freight rates are a serious damper, very nearly equalling in importance the disparity in farm and manufactured products already referred to. Railway wages are out of harmony with wages generally, and it is for the good of the country that adequate readjustments should be made.

We certainly think that the worst is over and that with the turn of the year, things will improve, the improvement gaining momentum as the disparities referred to diminish and finally disappear.

No Early Improvement

By G. A. True

Northern Crane Works, Limited, Walkerville

SUPPLY of raw material is now ample and prices are lower, but we do not think that prices have reached bottom. There is plenty of labor available; labor rates have been reduced about thirty per cent. and efficiency is good.

There is practically no market for our product and very few signs of early improvement. Prices are lower, but deflation is not

yet completed. We think that lower freight rates would help readjustment.

We do not look for early improvement. We have ceased to attempt to prophesy.

Improvement by Fall

By H. J. Bassett
Galt Malleable Iron Co., Limited, Galt

THE raw materials used by us consist principally of coal and pig iron. The supply is ample and quick delivery can be obtained at all times. The quality, if anything, is higher than during the active period which we have just passed through. Prices have been considerably reduced, but we do not yet think the bottom has been reached.

There is considerable unemployment in this district and consequently the labor supply is much in excess of requirements. Wages have come down approximately 35% in this industry. The efficiency of the workmen is greatly increased, and there appears to be more readiness to give a fuller day's work.

INDUSTRIAL DEVELOPMENTS OF 1921 ILLUSTRATED



Additions to Plant of Oneida Community, Limited

These buildings erected at Niagara Falls, Ontario, during the past year, enable the company to conduct more of their manufacturing operations in Canada. The top building is a steel and brick structure 40 x 60 feet in which are to be located their Quarter Finish and Die Sinking Departments. The second building, 40 x 130 feet, is of steel construction and will be used by the General Stores Department. In the third building a large electric furnace is to be installed for annealing.

Since the beginning of the year the demand for our products has been growing gradually less, until at the present time it is so bad that any change must be for the better.

In December 1920, we were charging an extra 30% on our list prices. We are now making a discount of 20% from list prices and do not yet feel that the bottom has been reached.

In industries such as ours where a large tonnage of material has to be moved over the railroad, the excessive freight rates at present in force have a very marked effect in the cost of our product. A large percentage of our output goes to the agricultural implement manufacturers and the heavy cost of transportation is therefore reflected in the ultimate cost of the implement to the farmer.

Our opinion with regard to the year 1922 is that the first half of that year will be decidedly quiet, but that a gradual improvement will then start in. One of the reasons for this opinion is, that the heavy stocks of agriculture implements at present in hands of the manufacturers will, to some extent, be liquidated, and the time will have arrived when the manufacture of new implements will have to be commenced. The railroad companies at that time should also be preparing for the crop movement, and will have to meet some very necessary expenditures in their equipment, so as to be ready to handle the crops. This, of course, will depend to a large extent on crop conditions.

Replacements will be Needed

By A. E. G. Madley
The Hydraulic Machinery Co., Limited, Montreal

WE have not had any difficulty in procuring such raw materials as we use and the quality has been fully up to the standard that we require. Prices in most cases are considerably less than a year ago, but in some instances there must be a further reduction.

We are using but a small proportion of the labor that we did a year ago and have had no difficulty with them even in reducing wages approximately 20%. Efficiency is very greatly improved and our records show that on specific work the time consumed is now equal to that of 1913 and is in marked contrast to war years.

The market for our product has been very limited, during the last six months particularly. The last 30 days indicate a better disposition on the part of buyers and we look for immediate improvement.

There has been a good reduction of prices of our product during the last year and we believe that in many cases they are at the bottom. There may be a further reduction in raw materials but these we believe are offset by present conditions and the consequent keen competition for the purpose of keeping plants partly in operation at least.

Existing freight rates are without doubt detrimental to industry generally and are largely the cause of existing high prices of manufacturers of metal. It takes a large quantity of varied materials to produce one ton of steel or iron castings, the freight upon which is so large a factor as to make the ultimate cost to the foundry exceptionally high. A readjustment of this condition would, we believe, result in much lower prices for machinery of all kinds and perhaps assist in stimulating industry.

We believe the outlook for 1922 is fair. We do not expect a large demand for new equipment but believe that replacements will be purchased more freely than during the past year.

(For additional reports on Metal Industries see page 170)

The Agricultural Implement Industry

Heavy Farm Machinery

By Arthur W. White

The George White & Sons Co., Limited, London

CONDITIONS in the heavy farm machinery industry during the past year were far from being satisfactory. In the spring of 1921 there was promise of a record crop in the Canadian Northwest. Ontario and the East also promised well; but, owing to bad weather, a large percentage of the western crop dropped off 50 to 75%. This applied only to certain sections of the country. In the sections where they had ample rain the crops promised well right up to harvest time, when, owing to wet weather and snow, it was almost impossible to have the crop harvested and threshed. Because of this delay, the higher-priced market was lost to the farmer, the grade of wheat was very much lowered, and the farmer had to sell at a much reduced price.

Low prices received by farmers applied not only to wheat and other grains, but to everything they had to sell,—cattle going begging at 2c. a pound, and absolutely no market for horses. During the war years and the year after the armistice was signed, farmers received very high prices for all their produce, which stimulated a buying movement in machinery—also at high prices —very largely purchased on long time paper. Farmers at the present time have not money to meet these payments, and banks have tightened up so that it is almost impossible for a farmer to borrow even on the best of security; and it is difficult to foretell what the outcome is going to be. There will have to be a balance struck somewhere.

At the present price of farm produce, the farmers simply cannot afford to buy machinery or any other material made under the present high wage rate and high cost of transportation. Transportation on the raw material, in its several stages of manufacture, until it reaches the farmer,—the final consumer,—is largely responsible for continued high prices. Transportation on the farmers' produce is also largely responsible for the necessary high wages to enable the working man to live. It is useless for farmers to grow oats, corn, etc., or raise cattle, when the transportation is more than the price he will get delivered.

No doubt, times will right themselves, and a balance will be struck in the near future: but until such times arrive, the farm machinery manufacturer would be very foolish to carry on to full capacity, making machines during the winter for sale the following summer, without any assurance that there will be a market for the machinery: depending on crop conditions and the farmers' ability to raise money. All farm machinery manufacturers are carrying large inventories. In the United States it is estimated that 40% to 60% of last year's output is being carried over. Some companies are more fortunate than others, and are proceeding with a partial output for next year: but even these factories will not be running to full capacity. A number of factories are now closed down entirely, and will probably start up from 30% to 50% capacity after the first of the year.

Manufacturers have no difficulty in securing raw materials at fair prices. Labor has been plentiful, but wages are still high, particularly when compared with the price that the farmer is getting for his produce.

Prices of farm machinery will be considerably lower for 1922, but still altogether too high to warrant a farmer buying unless he has some assurance that his produce can be placed on the market at a price corresponding to the price he is paying for the goods he requires.

Severe measures may be necessary to correct the present conditions; but, no doubt, the spring of 1922 will see these conditions being corrected, and a balance struck to obviate the great spread between the price paid to farmers for produce and the market price to the final consumer.

Dependent on Farm Prices

By S. Dolden

A. Stanley Jones Co. Ltd., Saskatoon

WE have been in the market very little for raw material, but what we have purchased has a considerable way to go, before it reaches pre-war prices. We have found supplies ample, but the quality seems to be very variable.

Depending largely as we do, on permanent employees, we have found efficiency very good, our employees apparently wishing to get back to a normal basis as soon as possible. We have been able to make considerable reduction in labor costs.

The market for our product the last year has been only moderate. There has been considerable improvement in the last two months and prospects for 1922 seem quite bright.

The trend of prices is naturally downward, but they cannot reach rock bottom until freight rates are lowered, and also materials. Freight rates are certainly too high in comparison with other prices, and we consider the greatest need at the present time is a reduction in freight rates.

The outlook for 1922 seems very promising and we certainly believe that the worst is over. From the number of inquiries being received, we believe that, if the price of farm products would rise, there would be a considerable improvement over 1921.

Business is Slack

The Experience of a large Ontario Manufacturer of Farm Implements

RAW materials are, of course, considerably cheaper than a year ago; quality is satisfactory and deliveries can be made promptly. We find, with respect to labor, that men are much more willing to work and appreciate employment at the present time. We have made reduction in wages during the year of from 10 to 20 per cent.

Market conditions are not hopeful. At the present time we are getting little or no business and prospects for future business do not seem to us to be any too bright. So far as prices are concerned, these have been reduced from 20 to 25 per cent. There cannot be further reductions in prices until wages and raw materials are very much reduced. Farmers have had such poor crops and their prices are so low that they haven't got the money to pay. Conditions will not be normal until there is a more equal basis between what the farmer produces and what he buys.

Just at the present time the outlook for sale for 1922 does not appear to us to be very bright. We are quite sure that it will not be until on in the summer that improvement will come and then only if there is a promise of good crops.

Future Dependent on Crop

By W. H. Whitaker

The Goold, Shapley & Muir Co., Limited, Brantford

RAW materials in our lines which cover both lumber and steel products have been very satisfactory as to supply and anything could be secured very promptly as required. Quality has been satisfactory and prices have a marked tendency to decline during the past year. Prices of raw material for our industry are lower than they were a year ago, quite considerably. We doubt however if the bottom has yet been reached.

Labor in our vicinity and community is far too plentiful for the work to be done, and we have very considerable unemployment. Wages have been reduced with us about one-third. The efficiency of labor is much better than formerly; brought about no doubt, by an excess of labor, and any person having a job doing the very best he can to hold it.

In reference to markets, our company sell largely to farmers. Our output is very much below previous years. The farmers have been reluctant to buy even their requirements, and we do not notice any improvement in the demand, nor do we look for any marked improvement until the farmers of Canada have harvested another crop, and then something depends on what the quality, quantity, and price of this crop may be, as to whether it will result in marked improvement in the demand for production.

In reference to prices of finished products, we have steadily lowered our prices to our customers, and as labor and material further decline we of course naturally would reduce our prices, to if possible, induce a return to something like normal business. We do not think that deflation has been completed.

In reference to outlook, we do not expect very much improvement until another crop is harvested. We do hope the worst is over and that there may be improvement from this date forward, but we are not looking for this to be at all marked before next Fall, and then dependent upon conditions as they develop. There seems to be however very much in the general trend of conditions tending towards hopefulness for the future, such as the success of the Conference at Washington; the settlement of the Irish question, and the general improvement noticeable in European affairs. All these matters tend to inspire hopefulness, and Canada, having such tremendous natural resources awaiting development, can with considerable confidence look forward to a prosperous future under care, thrift, and industry.

Mining and Metallurgical Industries

The Mineral Industry in Canada During 1921

By WYATT MALCOLM
Geological Survey, Ottawa

THE mineral industry of Canada is suffering from the general industrial depression. During the war and the succeeding period of reaction and apparent prosperity, a great demand arose for minerals and mineral products, and there was a considerable increase in production. The slump in industrial activities that came in the last half of 1920, had a serious effect on the mining industry, and the quantity and value of the production for 1921 is very much lower than that for 1920.

In the return to normal conditions, the movement towards pre-war values has not been uniform among the various commodities for human consumption or among various human activities. Whether new relative values will become established or whether stabilization will not take place until the same relative values are restored that existed prior to the war, it is not our purpose to discuss. There is, however, a strong feeling that many commodities have not yet reached rock-bottom prices.

In the case of minerals and metals, a complete restoration of relative prices that existed before the war, has not been effected. Copper and zinc are sold at lower prices than were received in 1913; but iron, steel, and coal are still high. Lead stands at about 1913 prices. There are tendencies towards an evening-up of prices to the former level; but not until manufacturing and construction work are speeded up is there likely to be a strong, steady demand for the most of the products of the mine and quarry.

The following notes on a few of the leading minerals of Canada will give some idea of the effect on the mineral industry of the great disturbance created by the war, and of the difficulties encountered in an endeavor to return to normal conditions. It will be seen that, although production has fallen off greatly in the case of certain minerals, there is a marked increase in the case of others. The outlook should be one of optimism. Mineral products enter largely into the articles that form the material foundation of modern civilization. The revival of industrial activity—which is sure to come—will thus bring with it a revival of mining.

The nickel industry is one that has been most seriously disturbed by conditions created by the war and by the return to normal. During the war there was a very marked increase in production, and the demand for nickel was so great that a third company was formed, and a new smelter and two refineries were erected in Canada. Immediately following the war, there was a slackening in production. The reaction, however, which expressed itself in luxury and extravagance, served as a powerful, though short-lived, stimulus to the industry.

The industrial depression which came in the autumn of 1921 had a most detrimental effect, and led to the closing of the two Canadian refineries and two of the three smelters, and to a great curtailment in mining operations. This drastic curtailment in production means that there will be a marked falling-off in the value of the mineral production of Canada for 1921, since nickel has held the leading place for several years among the metallic minerals.

Fears are entertained in some quarters as to the effect of the conclusions reached by the disarmament conference at Washington. The prominence that was given to nickel during the war, led to the belief on the part of some that this metal is essentially a war metal. This is a mistaken idea. Large quantities are used in the production of steel for industrial purposes; and nickel-steel enters into the construction of such articles as automobiles, locomotives, and bridges. Attempts are being made to educate the public to other uses of nickel—particularly to the use of monel metal, an alloy composed almost wholly of nickel and copper and obtained directly from the matte. Expansion in the use of this alloy and a return to normal conditions in the steel industry will lead to a revival of nickel mining. Nickel has become one of the essential peace metals, and the future of an industry turning out a product that enters to so great an extent into the materials and instruments of peace, is assured.

There has been a very noticeable decrease in the production of copper. This is due, in part, to the break in the copper market, which came with the general industrial depression; and, in part, to causes purely accidental.

British Columbia, which is the leading copper producing province, has been more active than any other province during the year, although it will show a considerable decrease in production. One of the most serious causes is the loss of the concentrating mill of the Britannia Mining and Smelting Company. One of the largest copper mines of the province was operated by this company and the loss is a serious blow to the industry. At Anyox, where another large copper deposit is being worked, operations have been carried on continuously. Labour has shown a willingness to bear a share in the general reduction of costs, thus making possible a continuance of mining and smelting in the face of a flat market. The mine at Anyox accounts for a large proportion of Canada's production for 1921.

A large sum of money has been spent in developing a copper deposit on Copper Mountain, Southern British Columbia, and a power transmission line and a railway spur have been extended to the mine. Mining operations were started late in 1920, but were soon discontinued. The owners are, no doubt, watching with interest, the recent tendencies towards a strengthening of the copper market.

Ontario ranks second among the provinces in the production of copper. The Ontario production comes from the nickel-copper mines of Sudbury, and is contingent on the nickel market. As two of the three nickel producing companies have discontinued operations, and as the third company is limiting its output, the production of copper from Ontario is small.

The depression in the copper industry, however, is but temporary. With a return of prosperity, there will come a greatly increased demand for this metal. The market is taking on a stronger tone. There are evidences that surplus stocks are being reduced; orders for home consumption in America, and for export—particularly to Germany and Japan—are more plentiful. Producers are keeping close watch on the market, and are making fractional advances in quotations as the demand increases, hoping, thereby, to raise the price to a figure that will once more justify production on such a scale as will make operations profitable.

There has been little change in the petroleum situation. The results of explorations and borings made in 1921 have not been encouraging. No new oil field has been brought into production as a result of the expenditures made in Alberta and British Columbia. A great deal of interest was shown early in the year in the possibilities of the Mackenzie basin. This was aroused through the discovery in 1920 of oil in a boring made 45 miles below Norman on Mackenzie River. The extent of the operations in the Norman district during the year 1921 was disappointingly small, and little can be said to have been done as yet to prove or disprove the existence of an oil pool that can be regarded with favour by commercial interests. The Devonian system, in which the oil near Norman is found, is of wide distribution throughout the Mackenzie basin, and some interest has been shown in the possibilities of these rocks as exposed around the west end of Great Slave Lake.

The oil shales of Canada continue to receive consideration, and an experimental plant for the treatment of New Brunswick shales has been in operation. Investigations made by the Department of Mines, on the shales of the Pasquia Hills of Saskatchewan, have shown that they are not so rich as could be desired.

There has probably been a considerable shrinkage in the production of coal, the output for the first six months for 1921 being 6,783,060 tons as against 7,929,269 tons for the corresponding period of 1920. An encouraging feature of the coal industry, however, is the fact that shipments up the St. Lawrence have been resumed, and a small quantity of coal from Nova Scotia has reached as far west as Toronto.

Canada has never been a large producer of iron ore, her furnaces being supplied chiefly from ore obtained from Newfoundland and the United States. The Magpie mine in the Michipicoten district, Ontario, closed early in March, and the production for 1921 has, therefore, been very small.

Owing to the small amount of construction work being carried on, there has been considerable curtailment of the asbestos industry. Prospects are brightening, however, and the end of the year sees the extension of mining operations.

Silver is produced in Yukon territory and in the provinces of British Columbia and Ontario. It is associated with the lead ore now being produced in the Mayo district, rendering the ore sufficiently rich to bear the heavy transportation charges from the interior of Yukon territory. It is also produced in the Portland Canal and Alice Arm mining districts, British Columbia, and is obtained from the lead-zinc ores of the Kootenay district.

Cobalt in Ontario, however, continues to be the most important silver camp of Canada. The production of the Cobalt mines has been

on the decline since 1911, when it reached high-water mark. High prices for silver during part of 1919 and 1920 led to the mining of ore of much lower grade than was previously possible. The subsequent drop in prices and the scarcity of power occasioned by low water during the winter of 1920 and 1921, led to the closing of a number of mines. As power again became available, and supplies cheaper, and as the silver market assumed a somewhat better tone, a few mines were re-opened. There are, however, some that will probably not be worked again except under very unusual conditions. There comes a time in the history of every mine when the ore reserves become exhausted. The camp is, however, still an important factor in the mineral industry. The production during the first nine months of 1920 and 1921, was 7,831,143 ounces and 6,586,910 ounces, respectively.

There has been a striking increase in the production of lead and zinc in spite of a big drop in price of the metals. The provinces of Ontario and Quebec, and Yukon territory, are producers of lead; but the great proportion of these two metals comes from the Sullivan mine of southeastern British Columbia. This is recognized as one of the big mines of the world today. The production of lead and zinc for the first six months of 1921 was 32,875,616 pounds and 28,236,103 pounds, respectively, as compared with 35,953,717 pounds and 39,863,912 pounds, respectively, for the calendar year 1920.

A most encouraging feature in the mining industry is the great advance that is being made in gold mining in the province of Ontario. Ontario is the leading gold producing province and the extension of this industry is a matter of great gratification. Gold is one metal the mining of which is favored by falling prices, adverse exchange relations, and general unemployment.

The high prices that prevailed during the war and the succeeding period of reaction, the scarcity of labor, and the inefficiency of the laborer were detrimental to the carrying on of an industry of which the finished product maintains a fixed value. In spite of these drawbacks the production of gold in Canada was well maintained. In the province of British Columbia a considerable quantity was recovered in the refining of the copper ores and from lode and placer deposits, and in Ontario the bodies of lode ore were sufficiently large and rich to permit of a continuance of the industry even under adverse conditions.

The production in British Columbia during 1921 showed a decrease. The production in Ontario, however, was marked, as mentioned above, by a very decided increase although the operators were disheartened during the first three months of the year by conditions over which man has no control. There was a shortage of electric power so that, while other conditions were favorable, only power enough was available for conducting work at a fraction of the mining and milling capacity. When sufficient electric power became available in April work was resumed on an extensive scale and has since been carried on intensively in both the Porcupine and Kirkland Lake districts. The Hollinger mine, one of the most important gold mines in the world, is milling over 3,500 tons of ore daily; other companies are producing at capacity, and some are increasing the capacity of both mine and mill. Some of the factors favorable to these increased activities are: the reduction of mining operations at Sudbury and Cobalt setting free large numbers of skilled miners; a great increase in the efficiency of labor; a reduction in the cost of mining and milling supplies; and a drop in the cost of living. A very decided favoring factor is the payment for gold in New York funds.

Mining in British Columbia During 1921

By H. MORTIMER-LAMB

Secretary, British Columbia Division, Canadian Institute of Mining & Metallurgy
and Secretary, Mining Association of British Columbia

IN common with other mining countries, British Columbia has been affected very adversely during the past year by the fall in the prices of the base metals, copper, zinc and lead,—consequent on the steady accumulation, in particular since the close of the war, and of the general depression of trade of the past two years. Copper's decline from an average market price of 17.45c. in 1920, to an average price of 12.41c. in 1921 means, roughly, a depreciation in marketable value of 29%. In the case of lead, the average price in 1920 was 7.96c. and in 1921, 4.53c., or a decrease in market value of 43%. The price of zinc fell from the average 7.67c. in 1920, to 4.62c. in 1921, or a decline of nearly 10%. No less marked has been the decline, equivalent to 37%, in the price of silver, and as, in British Columbia, this metal is produced mainly in connection with the mining of lead and copper, the effect of its depreciated value has been doubly inauspicious. In brief, it may be affirmed that such metal mining operations as have been conducted

NEW DEVELOPMENTS OF 1921 ILLUSTRATED



The Chippawa Power Development

One of the most important pieces of work during the past year has been the completion of the Chippawa Canal by the Hydro-Electric Power Commission of Ontario for the further development of the water power of the Niagara Peninsula. The photograph above taken in October last, is an aeroplane view of the end of the canal and the partially completed power house. It shows one penstock already in place and positions of the other eight are indicated by cuttings at right.

during the past year have afforded but a narrow margin of profit; in certain instances they have been conducted at a heavy loss.

Two companies only have carried on continuous large scale metal mining operations during the year. These were the Consolidated Mining and Smelting Co. of Canada, operating the Sullivan zinc-lead mine, in East Kootenay, and copper-gold mines in Rossland; and the Granby Consolidated Mining, Smelting and Power Co., operating copper mines at Anyox. To their activities may be attributed the fact that the metalliferous output for the year, in point of quantity, has been maintained at a level not pronounceably below that of last year; indeed there has been an actual gain in lead and zinc production although the copper output was not over 70% of the 1920 yield. Measured, however, in terms of values, the production of silver, copper, lead, and zinc, will, it is estimated, be not much more than one-half that of 1920. In other words, instead of a production of these metals valued at nearly nineteen and three-quarter million dollars, this year's output will not have a valuation much in excess of eleven million dollars.

In 1920 the returns in respect of gold, from both placer and gold mining, gave, in round figures, a valuation of $2,700,000. The yield in 1921 probably will be rather less. Coal and coke production is estimated to have been, in 1921, about 85% of that of 1920; and generally speaking it may be added that the coal mining industry of the Province has been on a rather more satisfactory basis than that of any other class of mining, notwithstanding the fact that wages remain high and there are other adverse conditions militating against the expansion of the industry.

Competition of Fuel Oil

Of these conditions on the Coast, the most formidable is the competition with which operators are confronted by reason of the importation of fuel oil from California to replace coal for use both on railways and in the industries. It is estimated, for example, that last year the consumption in British Columbia of fuel oil was over four million barrels, valued at twelve million dollars, to the displacement of one million, two hundred tons of coal. The imported fuel oil is merely a residium or by-product from the Californian wells, the valuable gasoline content having first been extracted. It can, therefore, of course be sold at a very low price. But having regard, as surely we should, to the more important consideration of the prosperity of our own industries, shared as this prosperity must be by the community as a whole, such advantages as the users of imported fuel oil may derive might well be discounted; and a whole-hearted support given to the proposal that the duty on this foreign product should be increased sufficiently to afford the coal mines of Vancouver Island the measure of protection that would enable them to combat successfully competition from this source. The disastrous effects on this industry consequent on the use of fuel oil is emphasized by the statement that the present annual production of the Vancouver Island mines is nearly half a million tons less than it was ten years ago.

In conclusion, an optimistic note may permissably be sounded. Undoubtedly the clouds are dispelling, if slowly, and brighter days are again dawning for the mining industries. World events are so shaping as to indicate an earlier re-adjustment of the complex and difficult post-war problems of international commercial relationships than even the most sanguine had been inclined to expect. There must necessarily follow in due course a normal resumption of trade.

The Metallurgical Industry

By W. B. TIMM

Mines Branch, Department of Mines, Ottawa

DURING the year 1921, little progress has been made in the establishment of new works, additions to existing works, or changes in plant equipment, in the metallurgical industries of Canada. This was due, for the most part, to the condition of the metal market. In many cases, prices were down below those of pre-war days, and what demand there was for supplies could easily be furnished from accumulated stocks. Not until existing stocks are used up, and foreign countries are in a position to purchase, can we expect a betterment of conditions.

At the beginning of the year, many of the large producing companies, hoping that normal conditions would soon return, and consumption equal production, were content to operate at a loss rather than close down their works. As time went on, and the immediate future held no hope of a quick return to normal, with stocks accumulating monthly, it was manifest that, the longer they operated, market conditions were becoming gradually worse; hence, they were forced to suspend operations. Many of the big copper, lead, zinc, and nickel companies in the United States and Canada ceased producing, and the iron and steel companies curtailed production 50 per cent.

As regards Canada, however, there was a brighter outlook, in that the gold mining industry throughout the Dominion was in a flourishing condition. While the production of iron and steel decreased to 50 per cent. less than that of the 1920 production, copper to about 60 per cent., and nickel to less than 20 per cent., there was a large increase in the production of lead and zinc —in the amount of production, if not in monetary value—and a greater production of gold, while silver production was maintained.

As a result of conditions in the industry, many large companies are retaining only a limited number of their staff, to form a nucleus for future operations. These officers are confining their efforts and attention to research work in connection with the ores or products peculiar to the company's business. The result will be greater efficiency; economic changes in, and new additions to, plant equipment.

Iron and Steel

The production of iron ore in Canada, during the year 1921, was practically nil, as the chief producers, the Algoma Steel Corporation, and Moose Mountain Limited, have closed their mines. A few hundred tons of magnetic ores have been shipped from British Columbia to the United States and England; but this was for experimental purposes in connection with electric smelting.

During the first part of the year, Canadian blast furnaces in operation were those of the Algoma Steel Corporation at Sault Ste. Marie; the Steel Company of Canada, at Hamilton; the Canadian Furnace Company at Port Colborne; the Midland Iron and Steel Co., at Midland; and the Dominion Iron and Steel Co., at Sydney, Cape Breton. All the blast furnace plants used imported ores. At the end of June, six furnaces were in blast; three at Sault Ste. Marie, one at Hamilton, and two at Sydney. Several large rail orders, placed at Sault Ste. Marie, and Sydney, have been the means of keeping the plants in operation. During the last half of the year, buying has been more active. There has been an increased demand for automobile parts, machinery, and structural shapes. It would seem that production has turned the corner and is on the up grade.

During this year, a number of plants were built in Ontario and Quebec for the manufacture of stoves, furnaces, agricultural implements, etc. The Canadian Locomotive Works at Kingston built an addition to their plant. The English Electric Steel Co., contemplate extending their operations to Canada, and establishing factories for the manufacture of electrical machinery and equipment.

Experimental work is being carried on at Sellwood, Ont., on the Moose Mountain ores; and in the United States and England, on British Columbia ores; to determine a process whereby these ores can be worked profitably.

The production of ferro-alloys, such as ferro-silicon, ferro-phosphorus, and spiegeleisen, will be below that of last year.

Copper

The production of copper will be about one-third that of 1920. This metal, with nickel and cobalt, has suffered most from over production. As a consequence, many of the large copper producers in the United States and Canada were forced to suspend operations. April saw the closing down of such large plants as those of Anaconda, Chino, Utah; Ray-Consolidated, Nevada; Phelps Dodge, Inspiration, Calumet and Hecla, and others. In Canada, the Britannia Mining and Smelting Co.; the Canada Copper Corporation—which had only been operating for a few months; the British America Nickel Corporation, and the International Nickel Company, producing copper as a by-product, closed their works. The Consolidated Mining and Smelting Co. of Canada, gradually cut their production to about one-half. The only large company which continued operations without curtailment, was the Granby Consolidated Mining, Smelting and Power Company, producing about 2,500,000 pounds monthly.

The large stocks on hand are being gradually used up, and the market has been improving since August, when the average price of electrolytic copper in New York was 11.63 cents per pound—the lowest for years. In November, it had reached an average price of 13.04 cents per pound. With the improvement in the market, the copper producers in Canada are awaiting the opportunity to renew operations on a larger scale than ever. A large ore dressing and concentration plant is proposed for the Granby Consolidated Mining, Smelting and Power Co., at Anyox, B.C.; a new concentrator is to be built at Howe Sound, to replace the one destroyed by fire; new mills are proposed for the Sunloch and Old Sport Mines, Vancouver Island; operations are to be renewed at Copper Mountain. Increased activity has already been shown at Rossland.

During the year, the old mill of the Le Roi No. 2 was remodelled, a flotation unit installed, and the mill put into operation, treating the old tailing dumps. The capacity of the copper refinery of the Consolidated Mining and Smelting Co., Trail, was increased to 50 tons daily, which is about equivalent to the total normal Canadian consumption of refined copper. Both ingot and cake copper are being turned out, and wire bars

INDUSTRIAL DEVELOPMENTS OF 1921 ILLUSTRATED



The Baldwins Canadian Steel Corporation, Limited

Built on land reclaimed by theToronto Harbor Commission, the immense tin-plate plant of the Baldwins Canadian Steel Corporation was opened early last year. The original plant was the property of British Forgings, Limited. Extensive additions were made when it was taken over by the present owners, three main buildings and several subsidiary buildings being constructed. The main tin-plate buildings have a total length of about 1800 feet.

will be a regular product of the new copper rod mill.

Nickel

Although the market quotations for nickel have remained more or less steady throughout the year, namely at 41 cents per pound for ingot and shot, and 43 cents per pound for electrolytic, the sale has been small, and stocks have been steadily accumulating. The British America Nickel Corporation, smelting works at Nickelton and refinery at Deschenes, closed down early in the year. The International Nickel Company of Canada, smelting works at Copper Cliff and refinery at Port Colborne, ceased operating the latter part of August. The only Company operating at present is the Mond Nickel Company, smelting works at Coniston. Their matte is shipped to Swansea, Wales, for refining.

These companies are carrying on much research work, and it is believed they have been successful in finding new industrial uses for nickel.

The situation with regard to cobalt is similar to that of nickel. The reduction works at Deloro, Ont., and Thorold, Ont., for treatment of Cobalt ores, have only been operating for the recovery of the silver. The arsenic, cobalt, and nickel sections of their works have been closed, awaiting a recovery of the markets.

Lead and Zinc

Lead has probably been in the strongest position of any of the base metals. Notwithstanding the rapid decline in price during the last few months of 1920, the quantity of lead produced by Canadian smelters has shown a notable increase. The market, while not strong, has been fairly constant, a large quantity finding its way into the manufacture of type metals, babbits, and solders, and for the manufacture of white lead, as well as in the production of lead shot and other forms used as ammunition. Another reason for the large production was, that most of the Canadian lead ores, especially those of British Columbia, which was the largest producer, are also ores of silver and zinc.

The production of zinc also showed a remarkable increase, in comparison with the record for 1920. The limited demand, and the slack metal market, did not decrease the output. This was due, as stated above, to the ores of zinc also being ores of lead and silver. The Canadian production was practically all from British Columbia; produced by the Consolidated Mining and Smelting Company of Canada Ltd., and, for the most part, from company-owned mines. During the year a market was found in the Orient for a considerable portion of the production.

Improved processes of treatment are credited for the showing made by the Consolidated Mining and Smelting Company in 1920 and 1921. This company, the pioneer in the lead-zinc industry in British Columbia, and the owners of the Sullivan Mines at Kimberley, probably the largest lead-zinc mine on the continent, has been untiring in its efforts to successfully treat these complex ores. In 1919, they erected a large experimental mill at Trail, to separate the minerals of the Sullivan ore. Since then improvements have been made from time to time in this difficult problem, resulting in increased recoveries and other economies which contribute to the reduction of the cost per pound of producing the metals.

As soon as conditions warrant it, a large mill will be built at Kimberley, to treat the Sullivan ores. This will involve increased capacity to their refinery, and also the development of more power at Bonnington Falls, on the Columbia river.

During the year a number of smaller producers were forced to suspend operations due to the low market price of the metals. Among these were the Silver -Standard, in the Hazelton district, B.C., and the majority of the mills in the Slocan.

Other Metals

Canada imports a considerable quantity of tin metal. This is rolled into sheets, used in the manufacture of cans, and other products. The Baldwins Canadian Steel Corporation has completed its tin plate mill at Toronto.

During the year a large amount of research has been carried on in the use of the metal molybdenum, and its introduction into steel. Heretofore, the main trouble has been in producing a uniform product. This was mainly due to the high percentage of molybdenum used. It has now been proven that when added in quantities less than one per cent, none of the previous troubles are experienced, and molybdenum steels, as a class when compared with other alloy steels which are in the same category, from a commercial standpoint, treated to the same tensile strength, show a slightly higher elastic limit, hence a somewhat higher elastic ratio; a higher elongation, hence greater ductility; and a much higher reduction of area, hence greater toughness. Molybdenum may be added to the electric or open-hearth bath, either in the form of calcium molybdate or ferro-molybdenum. Canada, during the war period, produced large quantities of molybdenite in the form of concentrates and ferro-molybdenum, and the research along the lines above indicated should result in the re-opening of many of the mines and concentrators in the not distant future.

During the year only one chrome mill has been operating in the eastern townships, shipping its concentrate to the United States.

The situation with regard to manganese, aluminum, and antimony is practically the same as last year.

Silver

From January 1920, when the monthly average price of silver on the New York market was 132.83 cents per ounce troy, there has been a gradual decline to March 1921, when the average low-level was reached at 56.02 cents per ounce troy. Besides following the rest of the metals in their downward trend, the market in the east was curtailed by the inability of India and China to purchase, owing to famine conditions. The result was that the majority of the mills in the Cobalt district ceased operations for a time, and put their mills in condition for renewed operations on a larger scale, as soon as the market became stable. Since March, the price of the metal has gradually improved, and with it production. The four principal producers in the Cobalt camp, namely ,the Mining Corporation, Nipissing, Coniagas, and O'Brien, are working at full capacity. The Hudson Bay mill was put into operation in October treating 50 tons daily; and there are renewed activities throughout the Cobalt and Gowganda silver areas.

The production of silver for 1921, will equal, if not surpass, that of previous years. The gradual upward trend of the market for the last three-fourths of the year has tended to stabilize the industry and give confidence to the operators. Declining costs of material and labor, with greater efficiency, has helped to show a margin between the cost of operation and the value of production. Under the operation of the Pittman Act, the American producer has the advantage over the Canadian, as he receives $1.00 per ounce for bullion produced in the United States, while the Canadian producer is paid in accordance with the market quotation.

Ontario was the largest producer, with about three-fourths of the total production. The British Columbia production, which practically accounts for the remainder, is mostly from the zinc, lead, and copper ores, which carry silver, and is recovered as a by-product. The comparatively recent discoveries in the Mayo district, Yukon territory, and the developments to date, would

indicate that this district will be an important producer in the near future. It is reported that the Yukon Gold Company's operations at Keno Hill have been most promising, and that shipments of a few thousand tons have been made, averaging 200 oz. per ton.

Gold

The gold mines of Canada have been operating during the last few years, under adverse conditions, namely a shortage of labor and high production costs. As a consequence, the Nickel Plate mine of the Hedley Gold Mining Co., was forced to close down. As these difficulties were being removed, a shortage of electrical power, due to an exceptionally dry summer and autumn, curtailed production considerably in the Porcupine camp, but with the coming of spring, and the improvement of conditions, production gradually increased until the three large companies in this district were operating at full capacity.

The gold production of Canada for the year will be in excess of that of 1920. Ontario will lead; British Columbia will be second, and the Yukon third. At the present rate of production, seven gold mines of northern Ontario are producing bullion to the value of $1,500,000 monthly, or at the rate of one-third of the total output of the United States. The three principal producers are the Hollinger, the Dome, and the McIntyre, in the Porcupine district. It is in the Kirkland Lake district that the industry has advanced in the erection of a number of mills. The Wright-Hargreaves put into operation a 150-ton mill; the Teck-Hughes enlarged their mill to a capacity of 150 tons daily; the Ontario-Kirkland started their new 100 ton mill during the latter part of November, and the Tough-Oakes propose to have their mill in operation next spring. Other mills operating are those of the Lake Shore, and the Kirkland Lake Mining Company.

Throughout new Ontario, the most active prospecting and exploration work has been carried on during the year. The districts covered are Porcupine, Kirkland Lake, Matachewan, West Shining Tree, Lightning River, Larder Lake, Boston Creek, Skead Township, Bourke's Siding, Sudbury, Lowery Creek, Schreiber, Goudreau ,and Dryden.

In Manitoba, there has been activity in prospecting and exploration work in the Rice Lake district, and in the north-western portion of the province.

The production in British Columbia will be greater than that of the previous year, due to the opening of the Rossland mines; of the Nickel Plate mine of the Hedley Gold Mining Company, and the increased activity in placer mining. The shipments from the Premier mine in the Stewart district should be treble those of 1920; the output of the Belmont Surf Inlet mines has increased, and the Hidden Creek mines and associated smelters have been working steadily throughout the year. At the Premier, a cyanide plant was put into operation, the bullion produced being shipped to San Francisco for refining, under special permit.

A feature of the marketing of gold bullion is, that all sales to the Royal Mint, Ottawa, are paid for in New York funds; and the exchange situation has enabled the producers to obtain, approximately, three dollars an ounce more for their gold than with exchange at par.

The Non-Metallic Minerals

The markets for the non-metallic minerals, have, on the whole, been weak. The large stocks of graphite on hand, and the importations from Madagascar and Ceylon, have been the cause of the closing down of all the mills in Canada. Exports of crude magnesite calcined and dead-burned, had reached a considerable quantity in previous years, but these were curtailed as soon as the Grecian and Austrian magnesites could be obtained. The markets for mica, barite, celestite, and fluorite have been weak; while feldspar has been normal. The brisk market and high price for asbestos, in 1920, resulted in a number of new mills being built at Thetford mines, and in the Black Lake districts of Quebec. During the year the majority of the mills were forced either to close, or curtail operations. They are, however, in splendid shape for renewed activities as soon as the demand for the fibre increases. Until this year there was only one firm manufacturing asbestos products in Canada. A second factory has opened up, and the Johns-Manville Company, Ltd., at Danville, Que., one of the principal producers, is constructing a large plant for the manufacture of all kinds of asbestos products.

The Outlook for 1922

On the whole, Canada has not felt the depression as keenly as other countries.

With the exception of some of the base metals, such as iron, copper, nickel, and cobalt, a favorable showing has been made.

The coming spring should see considerable activity in the building trades, with a consequent demand for structural shapes, and other products of iron and steel. Rail steel and other material will be required for the maintenance of the transportation systems.

The surplus stocks of copper are gradually being used up. There is increased activity in buying by foreign countries. As Canadian copper ores contain considerable values in gold, the prospects of renewed operations are brighter than they otherwise would be.

The stocks of nickel had been steadily accumulating until a few months ago. It is, therefore, very probable that this metal will be about the last to show improvement. However, as these ores contain copper and the precious metals, and the research investigations are bringing forward new uses for the metal, and for a better recovery of the precious metal values; and since one of the large operating companies expects to have a steel plant of its own in operation in the near future, renewed activity may come sooner than is expected by the general public.

Lead and zinc are in a favorable condition, as the majority of the Canadian ores are what is known as "complex ores," carrying values in lead, zinc, and silver, and in certain cases, copper, and gold. Markets have been established, so we can look for an increased production over the remarkable showing of 1921.

There should be an increased production of silver during the new year. More of the mills of the Cobalt district, closed last spring, will likely renew operations, and the smaller shippers of lead-silver ores in British Columbia will commence producing again under more favorable conditions. The new silver district in the Yukon, and the opening up of Silver Islet, should have some bearing on increased production in the future.

The flourishing condition of the gold industry, and the feverish activity of the past summer throughout the Dominion, should result in a large increase in the output of the yellow metal. It is the opinion of many, that we are on the eve of a boom in gold mining. British capital is becoming interested. The coming year should see additional mills in operation in the Porcupine and Kirkland Lake districts, and at other points in the province of Ontario. Renewed activity in copper will add to the production of gold.

It is safe to say that the corner has been turned, and that there is now a feeling of confidence throughout the Dominion. The metal markets have been gradually increasing in strength, so that the metallurgical industry, during 1922, should make a much more favorable showing.

NEW DEVELOPMENTS OF PAST YEAR ILLUSTRATED



New Canada Cement Company Building

The ten-story office building illustrated above is being erected in Montreal for the Canada Cement Company Limited. It will have a frontage of 120 feet on Phillips Square and 165 feet on both Phillips Place and Union Avenue. Concrete and reinforced concerte construction are being used throughout. The facades on Phillips Square, Union Avenue and Phillips Place will be hard tooled cast granite.

The Automobile and Truck Industries

Market Has Been Restricted

By T. A. Russell
Willys-Overland Limited, Toronto

THERE has been, throughout the year, a downward movement in price of a number of raw materials, such as steel, leather, cotton and other fabrics, lumber, glass, etc. It is difficult to say that the bottom has been reached. No doubt this is so in respect of rubber, cotton and perhaps some grades of lumber. Fuel oil has lately moved upward. Coal has shown no marked decrease, due probably to the freight rates. The quality of materials is perhaps as good as available prior to 1915.

The difficulties encountered in securing labor have practically disappeared, and there has been a tendency to further reductions in wages. Wages have not reached their former level and there is disinclination to go lower owing to the present cost of food and clothing, rent and fuel. Taxes also have not diminished. There appears to be more inclination on the part of workmen to apply themselves to work, and this has shown improvement in efficiency, though not to the former standard.

The 1921 market for automobiles has been restricted, compared with previous years. The business has been "spotty" throughout the country. While the motor car is now recognized as an essential in practically all business and professional lines, as well as for farmers, the sales have been affected by the general tendency to refrain from buying during the period of reconstruction. This has had the effect of reducing our business for 1921 to about 50 per cent. of the previous year's volume.

Further reductions were made in the price of automobiles with a view to stimulating business and in anticipation of reductions in labor as well as to meet replacement values of raw materials. In this respect we believe the automobile has practically reached low point, as, taking our own production for example, our prices are relatively as low as in 1914. Of course, there is a tax now which did not then exist. As our prices are based on replacement values, we see no reasonable ground for further reductions.

The absence of a steady market, continued high taxation and transportation costs, tend to reduce volume production or the accumulation of made-up stocks. We believe that the freight rates have actually restricted the movement of articles of great bulk which ordinarily have to be transported in large volume over long distances, such as lumber, cotton, coal, grain and other farm produce. This, of course, stifles competition and in the last analysis causes higher prices to rule everywhere. It is recognized that products like lumber and coal can only move up to the point where the freight rate will absorb the producer's profit, and the restricted movement of these bulk commodities necessarily decreases activity in all lines of building and industry and has a general effect upon the purchasing power of the whole country.

The outlook for 1922 as it appears to us in the automobile business is that we may count on more business than in the year 1921, but until there is a more general industrial activity and a freer exchange of commodities by reason of reduced freight rates, the purchasing power will not be greatly improved. This means that, while we may look for continued business throughout the year, we cannot hope to assume operation of the factory with a full staff or full time. On the other hand, economies must be introduced everywhere and the production of the factory kept in line with the actual sales in the field.

The Motor Truck Industry

By A. M. Kerr
The Four Wheel Drive Auto Co., Limited, Kitchener

WE had no difficulty in securing all the supplies of material necessary during the past year, and at somewhat lower prices. In many cases the bottom has been reached, but in some others there is still room for reduction. Wages are down about 20% and with that reduction we are getting better service than we have had. The main idea with most of the men is to hold steady employment.

During the past season commercial business was slow but we did a fair business with governments and counties, who require trucks principally for heavy work such as road building. As we make only the 3½-ton size, our market was very limited. Our price was reduced early in the season to such an extent as to warrant us in believing that without any decided changes in the exchange or the tariff, our price will be maintained throughout the coming year.

The high rates of freight, and the high cost of rent are two main factors in adversely affecting business. We employ more skilful help than is used on the railways, but we cannot afford to pay them anything like the wages paid railway men. There is only one way to bring those rates down, and that is, to improve our roads and start a campaign to "ship by truck". In that way express service can be given at less than freight costs to-day.

The outlook for next year is better than was the outlook a year ago. The improvement will no doubt be slow, but we think it will be well maintained. A lot will depend on con-

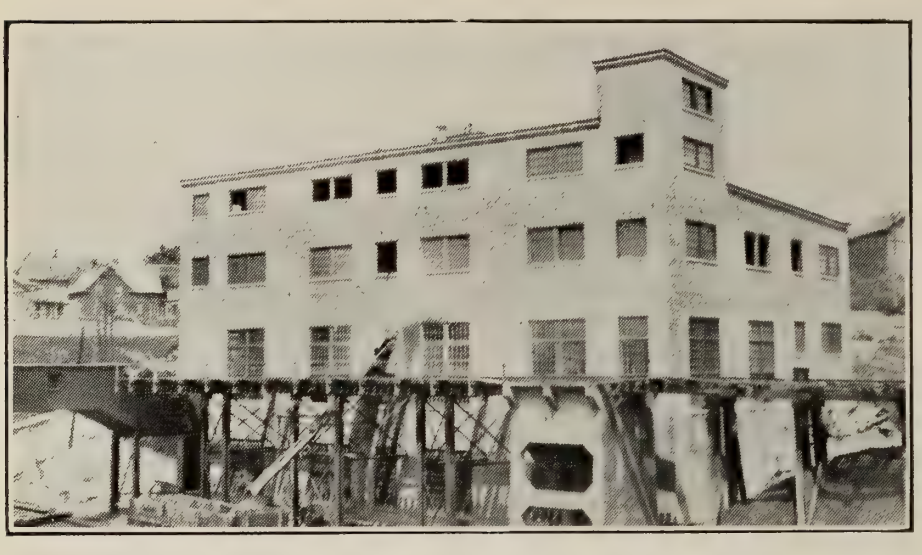
INDUSTRIAL DEVELOPMENTS OF 1921 ILLUSTRATED



The First Unit of the Plant of Durant Motors of Canada, Limited, Leaside, Ontario.

At the close of the War, the Leaside Munitions Plant, illustrated above, had just been completed. It stood unoccupied until last September, when it was purchased by Durant Motors of Canada, Limited, to form the nucleus of a new Canadian automobile industry. The main building is 130 x 640 feet, red brick with sandstone trimmings. New buildings are planned, including a three-story assembly plant and a wood-working plant for the manufacture of car bodies. It is hoped that production will be started by March 1st. When completé, the plant will have a capacity of 100 finished cars a day. The company will manufacture every important part in Canada.

INDUSTRIAL DEVELOPMENTS OF 1921 ILLUSTRATED



Brompton Pulp and Paper Company Expand

During 1921 this company completed the building of a new groundwood mill and a sulphate boiler house at their plant in East Angus, Quebec. The groundwood mill started operations in August; the boiler house, shown above, started in May. The mill is electrically driven throughout.

ditions in foreign countries. The hopeful signs are a tendency to save and a great deal better efficiency in every quarter.

Steady Improvement Anticipated

By W. B. McLean

Mapleleaf Manufacturing Co., Limited, Montreal

OUR raw materials are at present very easy to get owing to the depression. We get our supplies shipped promptly, and the quality is improving. Some prices have been cut considerably others very little. Our main units are approaching a pre-war level.

There is considerable unemployment, rather more than last year. Wages have decreased about 15%, but we still find it necessary to pay a good wage to get picked men. Efficiency has considerably increased.

Up to April we found the western market fair and the eastern market poor. After April trade was almost dead until the autumn, since which, we have had some revival on the eastern market. We figure that the orders we get are for replacements on trucks to meet the minimum demand and there is very little new equipment being bought, but any brightening up in business conditions would mean greatly increased demand for trucks.

There has been considerable cutting in the prices of trucks within the last year, some of which is due to decreased costs of material, but more of it apparently due to the necessity of unloading surplus stocks. There are indications that the prices of trucks are now approximately at their lowest level. They may reach a lower level at some future time, and probably will, but we would say that there would be a slight rise in between, as many trucks are now offered at a price which cannot give a fair return.

Freight rates are a very adverse factor, particularly in Canada where the distance of the hauls are so long. If these freight rates could be reduced we could distribute our trucks much farther than we do at present.

We figure that 1922 will be a little better than this year, and that from now on there will be steady improvement. We base this on some return of activity in building, and on the fact that we note the prices of materials to be steady, and the general impression that we are near the low level of prices.

General Review of Industry

By W. M. Gray

Gray-Dort Motors, Limited, Chatham

RAW materials have been plentiful from numerous sources of supply. It used to be a question of where can we get delivery, whereas during 1921 quick deliveries on a competitive basis were universally the order of the day. The quality of goods is steadily improving owing to competition and the wider range of selection at prices from 20 to 30% lower. It would appear, however, that prices have reached figures that will not vary much for sometime to come so that we look for that stability which is so essential to intelligent merchandising.

The amount of unemployment has been so wide-spread as to need no particular comment except that every action begets a reaction. From an orgy of spending was born the reaction of refraining from the purchase of anything that could be done without. This led to the demand for readjustment of prices, wages and everything that goes into the finished product. The industrial centres, overcrowded by those lured from the land by war and post war high wages had to be relieved of this surplus population which belonged to the land and the process of readjustment was severe on skilled and unskilled labor. As a result wages have decreased about 30%, but it is noticable that the workman to-day is more intent on production, more proud of his work, more anxious to hold his place in that particular branch of work for which his talents and ability qualify him.

There has been a marked decrease in the demand for automobiles this past year. In fact the automobile was the first to feel the buyers' strike. People commenced to clamor for 1914 prices, and sat back and waited. Take the materials that go into a motor car,—to-day they average over 90% more than they did in 1914, while labor is still higher than it was before the war. Despite rock bottom reduction the public has always anticipated "just another little drop". However there has been felt an improvement of demand in the last thirty days.

While the trend of prices of finished products has been downwards there seems to be every indication that the bottom has been plumbed.

Freight hits the automobile builder in the buying of his raw materials and the shipping out of the finished product. The high rates have been therefore very detrimental, and an item of cost that permitted of no reduction because it was immutable. Considering the fact that "reduce prices" was the insistent cry of the buying public this obstacle was stumbled upon at every turn of our pricing department in its efforts to look for reducable items.

The confidence of the buying public has been shaken, badly shaken and is badly in need of restoration, and until the public feels that a genuine return to economic basis has been established so long will it withhold its buying energies and keep its money tied up, out of circulation.

In forecasting the probabilities for 1922 we feel that the worst is over. A financial depression is something like a storm, it does not hit all the country at the same time. The present one started in the East and worked over to the West, but we feel that Ontario has passed the storm centre and its zenith of violence has passed generally, although the western territories will be the last to recuperate. Speaking generally and conservatively we are of the opinion that the business situation will not revert to normalcy until a new crop has been harvested and marketed.

Speaking specifically there are logical reasons for optimism in connection with automobile sales. Automobile prices have reached stable levels far in advance of other commodities, and as history repeats itself it seems reasonable to suppose that this will be one of the first industries to come back, and we predict that the spring of 1922 will herald the beginning of a steady upward trend in volume of sales. There is, of course this basic fact,—the automobile is not a luxury, it is an economic necessity in Canada's agricultural industrial and social activities and as such will again predominate in sales.

George W. Parks, president and general manager, Maxwell Motor Co. of Canada, Limited, Windsor, reports that the outlook for 1922 is most encouraging, hopefulness for the future being based on prevailing willingness of all classes to do their part honestly. Labor is more conciliatory; wages are down about 20 per cent.; and efficiency is very much improved. The Company feel that the process of deflation has been completed and are preparing for an expected greatly increased demand in 1922.

New Factory is Purchased

Announcement is made by Leo. G. Ryan, president of the Wingate Chemical Company, Limited, and of the Mallinckrodt Chemical works of Canada Limited, of the purchase of a new factory in Montreal.

The deal is one of the largest in commercial real estate in some months, the amount involved being well over $100,000. The building is located in the heart of the wholesale district at 468 to 482 St. Paul Street West, covering some 9,000 square feet of ground. It is five stories high and has a basement. Over 40,000 square feet of floor space will be at the disposal of the two companies mentioned and Smith & Nephew, Limited, another concern in which Mr. Ryan is interested, who manufacture surgical dressings and Sashena towels.

Shipbuilding Industry's Prospects

Fair Volume of Ship Repairing

By P. R. Miller
Canadian Vickers, Limited, Montreal

CONDITIONS pertaining to the supply and quality of raw materials are quite satisfactory, and prices during the last year have come down on an average of about 30%, although the prices of some materials have come down much more than others. We are expecting a still further reduction in the prices of some articles but the rate of reduction we believe, will be considerably less than in the past year, depending largely on the price of labour and the price of the necessaries of life, and taxation.

Employment conditions during the past year have been very bad, and are at present at the lowest level in this industry for many years. So far as Canada is concerned, the conditions militating against the revival of employment are much the same as last year, viz.: the great surplus in the number of ships available, and the depressed conditions of overseas trade.

Wages have come down approximately 25% during the past year, and the efficiency of labour is generally good.

There is a fair volume of business in ship repairing, although less than normal, but in shipbuilding there is absolutely no market, and no signs of any improvement. We do not expect any such signs for at least two years to come.

During the past year there has been a distinct reduction in the prices of finished products, and we are of opinion that they have not yet reached rock-bottom, and cannot be expected to do so until conditions generally become more normal, with a consequent revival of trade.

Freight rates are still high and amount to a very appreciable proportion of the total of materials entering into ship repairing and shipbuilding.

Other influences adversely affecting the industry are exchange rates with European countries, and the high cost of living with its effect on wage rates. While we look for a still further gradual reduction of wage rates during the next three or four years, we do not expect this reduction to be anything like so large as it has been during the past year, but until wages do come down to an appreciably lower level than they are even at present, we cannot see any hopes for a revival in the shipbuilding industry. Militating against this reduction is the high cost of the necessaries of life, including rents, to the working classes, and it would seem that a reduction in these prices must necessarily be a very gradual one from now onwards, so that the recovery may be expected to be slow.

We are of opinion that, in most lines of industry definite improvement has now set in, but in the case of shipbuilding and ship repairing, which were the last industries to be affected by the slump, they will be the last industries to be affected by the recovery of trade.

Features which inspire hopefulness from now onwards are, the recognition by labour that there must be a reduction in wages; the seeming desire on the part of the majority of the working classes, in Canada at least, to give production to a greater extent possibly, than other countries in Europe; the increased activity in building operations and in other lines of trade and industry which were abandoned during the War; the complete discredit of Bolshevism throughout the world, and the probable limitation in the expenditure of nations on production of armaments, which would presumably have a favourable effect on taxation, with consequent re-action on the cost of living.

Conditions Must Improve

By John S. Leitch
The Collingwood Shipbuilding Co., Limited, Collingwood

WE are not in the market at present for raw materials but would have no difficulty in obtaining all the steel that we require. Prices are down probably one-half of what they were a year ago and we are advised by the steel mills that prices have almost reached bottom.

Business is quiet and we are not in the market for labour. If we were we would have no difficulty in obtaining what we want, and I believe the efficiency would be up, because a great many of the men have had an idle spell, and those we are employing just now certainly pay attention to their work.

At the present time there is little or no demand for tonnage, owing to the fact that there has been a great amount of over production during the war years. Special ships for lake service will be required from time to time, and this together with repair work is what we expect to keep us busy in the near future.

As you are aware, ship builders have no form of protection or subsidy. We therefore have to compete in the open market against the world. Recently two canal size steamers for Canadian owners were ordered in New-Castle-On-Tyne at a price which no Canadian ship builder could reach.

Our view of the out-look for 1922 is that conditions must improve as things can be no worse than they are at the present time. If prices of steel and labour come down, some ship owners who have been holding off will be induced into the market, and we feel that there will be enough business to keep a fairly lare staff occupied.

INDUSTRIAL DEVELOPMENTS OF 1921 ILLUSTRATED



Buildings at Port Robinson, Ont., taken over by Hydro Appliances Limited

This plant was originally used as a canning factory by Dominion Canners, Limited. During the war it was turned into a munition plant. It became during 1921 headquarters of the new Hydro Appliances Limited, a company formed to manufacture the "Miss Hydro" electrical washing machine and other electrical appliances. All the necessary machinery has been installed and operations were commenced about the end of the year. The main factory consists of a two-storey building, 128 x 48 feet, with wing, 40 x 41 feet and engine room, 36 x 45 feet.

The Shoe and Leather Industries

Outlook Good For Spring

By J. Daoust

President, Shoe Manufacturer's Association of Canada, Montreal

I BELIEVE that the bottom has been reached in the raw material market and that from now on prices will firm up. Wages have declined from the peak by from twelve and one half per cent. to fifteen per cent. and I find that we have more efficiency than before.

The market for our products during the past year has been very poor but during the last three months there has been quite an improvement. Prices of leather have come down about sixty to sixty five per cent. and of shoes from about thirty to thirty five per cent. and I believe the bottom has been reached.

I repeat that the outlook is good for the spring of 1922, provided the Government will find a way to give work to the unemployed.

Many Orders on Hand

By Clayton E. Hurlbut

The Hurlbut Co., Limited, Preston

WHILE the supply of raw materials has been fair, the quality of calf skins, sheep skins and patent leather has been quite inferior to that purchased two years ago. It has been much harder to get the high grade qualities which we require for our particular line.

Conditions of employment and wages are the same as last year. We believe though. that the efficiency has improved somewhat.

We have had an exceptional demand for Hurlbut welt shoes and have a great many orders on hand at the present time. We expect that our sales will amount to what they did in 1920, although the price has receded about 30%.

Prices are about 30% to 35% lower than they were in 1920, and we believe that they have reached the bottom at least for some considerable time.

If the tariff is maintained, we believe the outlook for 1922 exceptionally good.

General Review of Industry

By G. W. McFarland

Williams Shoe Limited, Brampton

THE supply of practically all kinds of raw materials used in our industry has been fairly plentiful. There has, however, been a noticeable shortage of top grade upper leather in some lines and had the demand for footwear been buoyant throughout the year, there would have been, we believe a serious shortage of the top grades.

There has been a very decided improvement in the tannage of upper leathers and also in sole leather during the past year which has made it possible to produce better grade of shoes than was possible during war period and for some time after. There has also been an improvement in the linings and threads. In all of the above materials there has been a considerable decrease in price. Upper leather, we believe, shows the greatest decrease, ranging all the way from twenty to forty per cent. Probably a fair average decrease would be twenty-five per cent. So far as we are able to judge prices have reached as low a level as we can reasonably expect them to go under present conditions and we are buying our requirements for some time in advance without hesitation.

There has been some improvement during the past year in labor conditions. Inexperienced help has been available to a much greater extent than during 1920 and, as we train practically all of our own operators, we have been able to increase our production considerably during the past few months since the demand for footwear has become more active.

We have made no reduction whatever in our wage scale but are demanding increased individual production and better workmanship. As a result of this we are producing a new line of goods today which we would have hesitated to attempt to produce the previous year. There is a decided improvement in the labour situation generally so far as our observation goes. The spirit of unrest has, to a very great extent, disappeared.

The market for our product has fluctuated considerably during 1921. In the early part of the year the demand was limited. Toward the end of August, however, there was a very marked improvement which has continued up to the present time.

The trend of prices of our finished product has, of course, followed the general downward trend of the raw material market. There has been a decline of over twenty-five per cent during the year. The process of deflation has been completed beyond doubt. It would be utterly impossible to operate, except at a loss, on lower prices than those prevailing at this time, under existing conditions.

It should be borne in mind by those who are still impressed with the idea that there should be still lower prices for footwear, that, while there have been very liberal concessions made in the price of leathers and other raw materials, (all of which has been fully reflected in the present day price lists of the manufacturers) we have had to contend with excessive freight and express rates which have added a very heavy tax on the manufacturer and consumer alike. These high transportation rates have had a very serious effect upon the sorting business of those factories carrying stock for the accomodation of their customers, especially in so far as the Western and Maritime Provinces are concerned. These excessive charges have made it almost prohibitive for Western retailers to replenish their stocks from the East as it costs, for example, sixty-five cents a pair to deliver work shoes in Vancouver by express and about thirty-five cents a pair by freight.

There is a strong tendency on the part of the retail merchants all over the country to buy more frequently and in smaller quantities than heretofore and these excessive rates have worked seriously against such a policy. A substantial reduction in freight and express rates, we are convinced, would stimulate business not only for the manufacturer and retailer, but for the railways. Selling costs have been increased due to the exorbitant transportation charges and hotel rates, all of which adds materially to the cost of footwear.

The outlook for business in our industry for 1922 is promising. We have on our books at the present time the largest placing business we have ever booked and we have increased our production during the last two months nearly one hundred per cent. We are laying plans for a still greater production and we believe we will not be disappointed. We are thoroughly convinced that the serious trade difficulties are over and that a gradual improvement will take place practically all along the line. Labour will undoubtedly play a very important part in the recovery we anticipate by following sane, constructive, policy. The keen competition so manifest in the boot and shoe business today may be accepted by the public as positive assurance of the complete deflation and fair, reasonable prices in the future. Every constructive effort that is put forward from now on will carry with it a wholesome reward. Hard work, horse sense and faith will restore this country to normal conditions if we will all pull together.

Demand Somewhat Better

By C. F. Brigham

Getty and Scott, Limited

WE regard raw material prices as somewhat easier than at January 1st, 1921. The fact that sole leather hides are now selling at prices considerably higher than one year ago, we regard as indicative that high prices of this particular material will advance during the next 60 to 90 days.

Labor prices have not been reduced during the year. Efficiency of labor however, has somewhat improved.

There is at present a somewhat better demand for our products than obtained at the beginning of the year. The prices for our finished product are ruling lower than at the beginning of the year, possibly 5% on the average. We believe there will be no further reduction in the retail prices of our product.

The freight rates do not as a rule seriously affect the merchandising of our product. We notice however, a slight tendency on the part of those of our clients who are located at points of shipment farthest from Ontario, to charge back delivery charges on small shipments where formerly these charges were not considered excessive, and were rarely charged back to us.

We are of the opinion that we are facing generally improved conditions for distribution of our product for the immediate future. Stocks of all classes of merchandise in the retailers' hands appear to be the lowest on record. We are checked up closer on deliveries to large accounts than ever before. We note also that immediate use orders from our larger accounts are received more frequently, and are markedly increased in size.

Outlook More Favorable

By D. Marsh

The Wm. A. Marsh Co., Limited, Quebec

PRICES in the raw material market during the past year have tended downward and supplies, with few exceptions, have been plentiful. Labor has been only fairly well employed in this district and there has been little disposition to accept reductions corresponding with present living costs.

The demand for boots and shoes has not been brisk, the principal demand being for the cheapest kind of goods that can be produced. Quality seems to have been entirely

forgotten in the endeavor to purchase goods at low prices. Prices on finished goods have tended downward and it is not at all certain that the bottom has yet been reached.

The question of freight rates does not appear to affect our industry to a very great extent, although there is no doubt that, if these were reduced, costs would be correspondingly reduced and further deflation made possible. The principal adverse influences affecting industry in general, in our opinion, are lack of confidence on the part of the public and uncertainty as to the future.

The outlook for 1922 would seem to be more favorable. The result of the election, while perhaps it may not suit everybody's ideas, should have a steadying effect as soon as the Government announces its policy in regard to the tariff and other pressing matters. Uncertainty in regard to the tariff policy of the new Government will delay the return of normal buying, and the unemployment situation which is, in our opinion, a large factor in the slowing up of business, will not tend to improve until this question is settled.

Factors That Keep up Prices

By Hon. E. J. Davis

Davis Leather Company, Limited, Newmarket

DURING the past twelve months, business has been very quiet indeed with both tanneries and shoe manufacturers and, in their anxiety to try and keep their staffs together by doing what business they could, even if there was no profit, it would appear as if the prices at which high class leather and shoes have been manufactured and sold, were as low as the conditions would warrant. There is every reason to believe that for the next few months, present prices may be considered a safe basis on which to operate.

Perhaps there are no classes of business men who have suffered more severe losses during the past year and a half, through depreciation in inventory, than the tanneries and shoe manufacturers. To-day I think it would be safe to say that both tanners and shoe manufacturers have cut down their inventory to rock bottom replacement values and, on this basis, business has been carried on for the past few months and it would appear that prices of high grade upper leather and shoes of best quality are stabilized at to-day's prices.

Raw calfskins on this continent of good quality are somewhat higher in price than they were immediately preceding the war. Everything that goes into the manufacture of the raw skin until it comes out of the factory in high grade leather costs double what it did before the war and in many cases considerably more than that. Wages have been reduced very little from war rates. Coal, of which large quantities are used, while much lower than it was two years ago,—and I am speaking of soft coal,—still costs laid down at the plant a little over double what it did before the war broke out. Dyes, chemicals, etc. are still, taking them on the average, more than twice as high as they were before the war. Freight rates are fully double what they were before the war. Many of these goods have to be bought in the United States and there you have an exchange of ten or twelve per cent. or more added to the cost.

So long as labor, freight rates, the numerous taxes imposed and the various other items of extra expenditure, which we did not have before the war, continue, it will be impossible to produce leather at the same relative price, compared with raw material, as tanners were able to do before the war. My opinion is, the most important thing that the Canadian Manufacturers' Association can do is to keep impressing upon the authorities, who have control of such matters, that these extraordinary expenses must be lowered and the object should be to create a strong public opinion in this direction by pointing out the true reason why many manufactured articles are as high as they are to-day. It does not appear as though there could be any great revival in business until this is accomplished.

Outlook is Very Hopeful

By Charles Robson

The Robson Leather Co., Limited, Oshawa

SUPPLY of hides and skins of nearly every description has been ample, and the demand for the past three months fairly brisk. Quality is somewhat below pre-war standards. Compared with prices one year ago the packer hide market is today about 15% lower, while the country hide market is

INDUSTRIAL DEVELOPMENTS OF 1921 ILLUSTRATED



Plant, with proposed extensions, of the English Electric Co. of Canada, Ltd.

One of the most interesting developments of the past year was the formation of the English Electric Co. of Canada, Limited, an associate of the English Electric Co. of Great Britain, with exclusive manufacturing rights in Canada of all patents, designs and processes of the latter company. The new company, through the purchase of capital stock of the Canadian Crocker-Wheeler Company, Limited, acquired control of the plant at St. Catharines illustrated above. The view shows the present plant, which consists of the main building in the foreground, one of the three bays to the left and one of the buildings to the rear at the right. The other buildings represent the proposed extensions which will no doubt be erected as circumstances warrant.

about the same as during December, 1920, certain weights being a trifle lower, while other weights, such as extreme lights, are selling a shade higher.

Labor is more plentiful than a year ago. Wages are down about 25%, with efficiency considerably improved.

The leather market is fairly steady at today's prices, with interest centred mostly on the lines that will produce medium priced shoes. The demand is moderate, with an improvement looked for with the commencement of the New Year.

The trend of prices during the present year has been decidedly downward. The market today appears to be resting on a firm foundation. Prices on some lines of upper leather have recently been advanced.

Manufacturing costs are still high and will be for some time to come. This condition is slowly but surely becoming adjusted to a lower level as the cost of materials and living costs decline.

The outlook for the leather business during 1922 is indeed very hopeful, judging from the amount of business already in the hands of shoe manufacturers. The leather and shoe industry in Canada will enjoy great prosperity during the next few years.

Better Business by Spring

By J. Sinclair
The Barrie Tanning Company, Limited, Barrie

THERE has not been any scarcity of raw materials. Quality has, perhaps, not been up to the usual standard, especially in hides; and prices, in some cases, have fallen to less than pre-war values, although where this has happened, recoveries have been made during the last two or three months. There is not much doubt that the bottom has been reached for some of these materials; but it will be some time yet before we can expect semi-manufactured products to reach the bottom, this being due to high cost of labor and freight rates.

We are employing about the same number of men as a year ago, but have hardly felt justified, owing to the still high cost of living, in making any drastic reductions in wages, although, naturally, when we take on any additional help, we are not paying the same price as for men who have been with us through the war years. As for efficiency, none of us are going to run our plants efficiently until production is greatly increased. Until world conditions get straightened away, there is not much hope of running plants to full capacity.

The market, during the past year, has been a hand to mouth one only, as buyers, owing to unsettled conditions and prices, have not felt justified in purchasing more than was necessary for their immediate requirements. There has been some improvement during the past two or three months; and while there has not been any big business to speak of, still there have been considerably more small orders, and we look upon these as a hopeful sign.

Prices have been declining gradually all through the year, and today's prices are as low as can be expected until such times as manufacturing costs can be reduced. Freight expenses and wages are, perhaps, the big items today in the way of further reductions, combined, of course, with lessened production and consequent higher overhead per unit. Conditions are such today that, providing we got our hides for nothing, we could not manufacture leather for pre-war prices. We are inclined to think that this winter will not show very much improvement, although we are hoping for better business when spring opens up.

While the present European exchange conditions last, there is not much prospect of increasing production to any appreciable extent. We have always depended on the British and European markets to take care of our surplus, and until we can do so again, we will hardly be able to run our plants at the minimum of overhead prevailing before the war. We do think, however, that we have passed through the most severe part of the readjustment process and that conditions will gradually improve from now on.

Effect of Western Conditions

By B. F. Ackerman
B. F. Ackerman Son & Co., Peterborough

AS compared with a year ago, leather represents about one-half the cost it did. Saddlery hardware is reduced from 12 to 15%. Shoe findings, which include thread, hooks, eyelets, etc., are practically the same price. We do not see how it is possible for the tanners to sell leather at any lower figures but we believe the other materials mentioned above can still be reduced considerably.

Wages are exactly the same as a year ago. We perhaps could force a reduction but we have felt that our labour has not been remunerated on a basis with other trades and the manufacturers of our lines have felt that it is in the interests of the leather business to have their skilled mechanics, as nearly on a par as possible with those of other trades. This would be a more serious problem were it not for the fact that the labour cost of finished leather articles such as we make, is very small compared with the material cost. We have therefore been able to make big reductions in the selling price of our own goods, owing to the fact that there has been such a reduction in the leather itself.

We seem to have sold about the full quantity of goods for spring delivery. We are not receiving anything like the number of cancellations received twelve months ago. We attribute this to the fact that our goods are much lower in price, that there has been no recent reduction in raw materials, and that business generally has become more stable. We were in the unfortunate position a year ago of having a very large quantity of goods sold for spring, booked at the highest prices ever obtained in our line of business. At that time harness leather was selling at the average price of 90 cents but it dropped very rapidly and in consequence retailers became nervous and piled in cancellations, leaving us with a stock of made-up goods at extremely high costs. In spite of generous discounts it was impossible to clean this stock out and a large portion of it had to be carried over and in fact, a quantity of it will still be applied on this spring's business, at prices very much under the actual cost.

The last twelve months, therefore, have been the most difficult ones we have gone through, owing to the uncertainty of future values. Now, as stated above, although cancellations received have not been so numerous, on goods ordered for the coming spring, financial conditions in the West are such that credits will have to be curtailed considerably, owing to the fact that a large portion of our trade have been unable to pay for the present year's purchases. Retailers advise us that they cannot collect from the farmer and, in the majority of cases, we are satisfied their statements are correct. We anticipate, therefore, heavier losses than for some years past. In fact, we have already had a number of cases where customers have thrown up their hands and quit, and while it seems we have taken all our losses in reduced values on stock, we still have to face further losses on account of the very low prices the farmers are receiving for their products. It would almost seem, therefore, that it would take another twelve months for business to really become healthy again.

Manufacturing conditions are considerably improved over last year. The recent reductions in freight rates of December 1st. will help the Eastern manufacturers doing business in the West, but the express rates should be also reduced proportionately. It is not as difficult to obtain raw materials as it was twelve months ago. In fact, the manufacturer can depend upon reasonably prompt service in this regard.

Should retailers in the Western Provinces be able to clean up their accounts by December 31st., we believe the prospects would be fair for the coming year. The retailer whose liabilities are heavy, is not going to be anxious about increasing his burdens by further purchases. Should the average portion of the present year's purchases not be paid for by the retailers, it will affect, largely, their buying for the coming year. We think possibly, the lost trade in the West can be equalized by a vigorous campaign in the East. We are making preparations now to try and extend Eastern trade, to a greater extent than we have done for some years.

Harness and Saddlery

By E. F. Hutchings
The Great West Saddlery Co., Limited, Winnipeg

DURING the year we have had an ample supply of raw material, largely on account of the demands being much less than usual, although leather has been scarce at times. The reason for this we presume is that the tanners would not manufacture ahead because they expected possibly further reductions in prices of leather on account of the very low cost of hides. In this regard we might say that prices are considerably less than a year ago and we expect they will come down further unless hides advance. Raw material has gone through a reasonable reduction and the market is well supplied, qualities being up to the usual average.

Labor is plentiful as compared with this time last year. Wages have come down 20% and labor is much more efficient. We are not manufacturing as heavily as we were a year ago, but we expect to increase our factory staffs almost immediately.

The demand this year has been very disappointing on account of the great reduction in prices of farm products of almost every kind and the damaged crops. Farmers' profits have been very small and their buying capacity is in proportion. This, with their expectation of lower prices, has kept them from making any purchases they can possibly get along without, and the result is that the volume of trade has been considerably reduced over last year and we do not see much improvement for the near future.

The trend of prices during the year has been on the decline, with the exception of one or two minor articles. We do not believe that prices have reached bottom yet and we do not believe that the process of deflation has been completed. Deflation will not have reached bottom for a year or a year and a half yet.

As to the outlook for 1922, we might say that it will be practically a repetition of 1921, and all manufacturers must necessarily pull down overhead expenses and keep their earning power as firm as possible in order to save themselves from further losses. Very few manufacturers today are making any money. In fact they are mostly losing, and unless they adopt the above ideas they will continue to lose. The natural overhead is going on all the time in manufacturing; that is, taxes, insurance, wear and tear and deflation in the value of buildings, and I am inclined to think it will take our manufacturers all their time during 1922 to pay those expenses out of their profits, without carrying heavy stocks on a deflating market.

Flour Milling and Cereal Industries

A Satisfactory Readjustment

By A. E. Labelle
President, Canadian National Millers' Association

CANADIAN flour mills have gone through the same process of re-adjustment, during the past year, as all other industries have done, but I think in a much more satisfactory manner than others. The milling business, not having benefited by any abnormal profits during the war, kept much closer to the wheat markets, did not load up with high priced stocks, were able to hedge what they had to carry, and consequently were much better prepared to stand the depression. Wheat started downward at the coming-in of the 1920 crop. It started at $2.45 per bushel and during November 1921, it touched the low point of $1.00, but it has advanced since.

You ask me if the bottom has been reached. I hope so, because it is below cost of production of this crop. Still no one can say. It depends on what the crops in other parts of the world are going to be, and with new crops coming in at different times of the year, in different countries, prices are bound to vary quite a lot.

Our Canadian wheats have still the same excellent reputation the world over, and, with practical and intelligent handling, should result in not only creating more demand and better markets for our grain, but should also help to develop the milling industry of this country. There are over 1,255 mills in Canada with a capital investment of over $76,000,000, and these mills produced flour and feeds to the value of $232,000,000 in 1920. Although this is a wonderful result, still much better can be done for the good of every class in the country.

The highest price reached for flour (war quality) was $16.00 per barrel in 1917. Since that time, it has steadily declined to the present level of $7.50 (for highest patent) and let us hope that it will go down still further, although I do not think it will be possible before another crop, and then I do not think prices will go down to pre-war levels, at least, not until there is a re-adjustment of the conditions in the whole world.

Labor conditions have been pretty good, the whole year; such conditions have always existed in the milling industry.

There is practically only one big obstacle to the full expansion of the flour business, but it is a very serious one; it is the preferential grain export freight rates charged by ocean steamers and our own railways on wheat, as compared to flour, which nearly stopped export on flour this fall. In some cases it meant an advantage of over 30 cents per barrel, which is more than the profit that the mills make on flour. No one benefited by this, except perhaps, the carriers, but I am of the opinion that they will eventually lose in the end by such policy. Our farmers did not sell any more wheat and did not get any higher prices for it. The mills were unable to sell their flour, and consequently had to close down part of their plants. Farmers were unable to get the mill feeds they required for the cattle and paid more for it.

This adjusting of freight rates for export, is just as important as protection, as it must be borne in mind that the mills can produce over three times what is required for the domestic market. To my mind if this is settled, there is no reason to doubt that 1921-22 will be a good year for our industry. Mills would be longer in operation, giving work to more men, which every one realizes is paramount under present conditions, and more wheat would be exported as flour, which would not only help the marketing of our large crops, but by reducing the cost of milling, would enable mills to open new markets in which Canadian flours are unknown.

Handicapped by Differential

By D. A. Campbell
Maple Leaf Milling Co., Limited, Toronto

WITH regard to our raw materials, the crop of wheat this year is considerably larger than it was last year, but the price of wheat is just half what it was in November, 1920. It would seem as if the price were near the bottom.

Labor conditions are much better and greater efficiency prevails. Wages have come down from ten to thirty per cent.

The domestic market has remained steady and there is an improvement from overseas in the demand for Canadian flour. This is true of those mills which have maintained a high quality in their product.

It is reasonable to expect that the process of deflation in wheat is pretty nearly through, though it costs twice as much to move a bushel of wheat from Calgary to the Atlantic seaboard as it did in 1914. The price of wheat to-day in Calgary is as low as it was in 1914.

The milling industry is threatened very seriously owing to the differential maintained by the Canadian railroads on flour and wheat to the seaboard for export. The movement of wheat and flour is accomplished from Fort William to Georgian Bay or lower lake ports by water and thence to the seaboard by rail. The rail rates on flour from Georgian Bay ports or lower lake ports to the Atlantic seaboard are eight cents a hundred more than they are on wheat, although there is no difference in the cost of handling, particularly as mills located at lake ports load their own flour, whereas wheat is loaded by the railroads themselves and the charge for loading is absorbed in the rate to the seaboard. This difference of eight cents a hundred, or sixteen cents a barrel, is arbitrarily maintained by the Canadian National Lines. It is hard to understand why a Canadian government can deliberately put impediments in the way of Canadian manufacturers such as this. The policy of this country should be to build up Canadian industries, not to tear them down. Such a policy on behalf of the Canadian railroads forces the wheat abroad where it is ground by foreign mills. Prior to the war period, a differential of a cent a hundred was all that obtained as between wheat and flour to the seaboard. The attention of the Canadian National Lines has been drawn to this matter without result up to the present time. They are inclined to argue the point with the millers. One can scarcely understand argument on such a point. Why such an instrument in the prosperity of the country as a Government-owned railroad should be used to tear down Canadian industries is more than the millers can understand. As a matter of general policy, even if they lost money on hauling Canadian flour to the seaboard instead of Canadian wheat, it should be done.

The outlook for the millers is bright if the freight differential on the railroads can be overcome. At the present this is working serious harm, as above outlined.

Prices at Rock-bottom

By George A. Macdonald
The Quaker Oats Company, Peterborough

MARKET conditions on grains have been throughout the year 1921 almost constantly downward. Supply of all grains

INDUSTRIAL DEVELOPMENTS OF 1921 ILLUSTRATED



New Plant of Canada Bread Company, Toronto

This handsome building on Danforth Avenue, Toronto, was completed during the past year for the Canada Bread Company, Charles S. Cobb and the McCormick Company, Incorporated, being the architects and engineers. It consists of three storeys, 83 x 182 feet, of reinforced concrete and brick construction. The interior is completely fitted with bread-making machinery of the latest design.

throughout the same period has been ample, and the quality satisfactory.

We will probably have employed more labor during 1921 than during the year 1920, and wages have been reduced approximately 25%. The efficiency of our labor has materially increased.

The demand for cereal products and flour is increasing because of their relative cheapness as food. The trend of prices for finished products has been steadily downward until within the last sixty days. Our prices on finished products are down to rock-bottom except as prices on wooden cases, fibre board cartons and containers may be reduced further.

Freight rates have within the last year been altogether too big an item in the building up of costs. In the milling business the tendency to encourage the export of our grain as grain by special rates as against higher rates on the manufactured product is a serious one, as it enables the importing miller to undersell grain products milled in this country. The farmer, generally, takes the attitude that he does not care so long as he gets full return for his grain, but this is short-sighted, as Canadian grains milled in Canada and exported from Canada are purely Canadian products that will bring repeat business to Canada, whereas Canadian grains blended with other grains and milled in foreign countries do not necessarily bring repeat business to Canada. Furthermore, the by-products of milling grains are needed by the dairy farmer here and it is in the interest of not only the farmer, but every other Canadian, that as much Canadian grain be milled as possible in Canada and as little as necessary exported as grain. The needs of the day in the milling business are, first, stability to the markets, second, stability in foreign exchange, both of which conditions will create confidence.

With reference to the outlook for 1922, we are confident that we can do an increased volume of business. We have made up our minds some time now that the proper policy to pursue is to get costs down on our manufactured products. We are not looking for the return of so-called prosperity, but for some time now we have felt that prosperity is with the manufacturer who has worked, and worked hard for it. The days of easy prosperity in our opinion are over for many years to come, so we have gotten our costs of manufacturing down, our costs of selling down and our efficiency in all departments of the business increased. In getting our costs down we have made it a point to be fair with the workman and not to decrease our wages any faster than would be right and square to the workman. A good, honest day's work will produce lower costs; will enable the manufacturer to secure a larger volume of business than obtainable at higher costs and by reason of the larger volume thus obtained the manufacturer ought to aggregate a reasonable profit. The hopeful features to the situation today are that every one of us is more inclined to give an honest day's work for an honest day's pay, and so far as our business is concerned, raw materials have been liquidated to such an extent that they cannot go down much further.

The Financial Situation

By Sir Frederick Williams-Taylor
General Manager, the Bank of Montreal

THE subject of trade deflation has become a world-wide theme, but the trouble is that many of our merchants and manufacturers simply cannot deflate at present. The demand for their goods has disappeared, while money borrowed from the banks in anticipation of sales cannot be repaid—hence what are termed "frozen credits." Bank loans in many cases have thus become fixed, and the liquid surplus in mercantile balance sheets represented by inventories has, for the time being, lost its true meaning.

A year ago the inflation in trade was at its height, as is demonstrated by the fact that the aggregate loans in Canada of Canadian banks was 80.8% of their total deposits within the Dominion. The latest figures available show the ratio as 77.5%.

A sign of the times is revealed in the number of commercial failures. During the twelve months ended 1st October 1921 they numbered in Canada and Newfoundland 2022, which is more than those recorded for any previous similar period since 1915, when the number was 3016.

As regards the outlook in Canada and the prospect as affecting Canadian business generally, I have no desire to join the list of oracles who predict the date when normal conditions will be restored. For one thing, values are out of joint. Our main dependence is on our natural resources, and at present the purchasing power of the products thereof is at the lowest level reached for several years past. On the other hand, we still have with us high prices in other directions, while retail prices generally are conspicuously out of line.

The cause of this anomaly is still mainly the cost of labour. Unemployment is a natural corrective, though painful and regretted by everyone.

Apart from this, I cannot see how we can count upon improved conditions concurrently with trade revival in the United States. Conditions are similar in many respects, as everyone knows, but our liabilities and our mistakes are our very own. Aside from the cost of the war, we must pay the penalty of having mortgaged our future in the building or superfluous railways and in other extravagances.

Lockwood, Green & Company of Canada, Limited, have issued their calendar for 1922, which consists, as in 1921, of photographs of plants erected by them. Printed on heavy india tinted stock, with clear readable type, this production is artistic and useful, besides a most effective advertisement.

INDUSTRIAL DEVELOPMENTS OF 1921 ILLUSTRATED



St. Maurice Lumber Company, New Mill

The construction of this large extension at Three Rivers, Quebec, was commenced in August, 1919. Sulphite manufacture was started in December, 1920 and the company expect to have a proportion of the paper and groundwood mills running by March, 1922. In the left foreground of the picture will be seen the power plant and machine shop directly behind these are the screen room and screen room extension; and behind these is the paper machine room. The tall structure to the right is the digester building; to the right and behind it are the groundwood mill and main transformer house. In front of the digester building is the blow pit building and to its right is a covered supply pipe from oil storage tank to power house.

Pulp and Paper Industry Under Review

Business on the Upgrade

By C. Howard Smith
Howard Smith Paper Mills, Limited, Montreal

I BELIEVE that the greater proportion of the surplus of raw materials has been liquidated. There have been many "distress" sales of these, and in some instances these materials have been sold at very much less than their replacement value. Prices are down about 50% to 60% compared with what they were a year ago. Personally I cannot see how they can go down much lower.

There is quite an amount of unemployment, consequently labor is plentiful. Wages have dropped about 30%.

At the beginning of the year there were large surpluses of stock on hand in Canada and all over the rest of the world. The mills have produced the minimum quantity this year, with the result that these surpluses have been taken up, and the demand that there now is for goods is the minimum demand that the country can get on with. This demand is greater, by a very considerable extent, over what it was in the early part of the year, and we are noting also a demand for export.

Prices have come down to a very marked extent, and they are at bottom, or very near it. Some prices have gone too low and some, perhaps, not low enough. I do not anticipate very much change. There will be some readjustments.

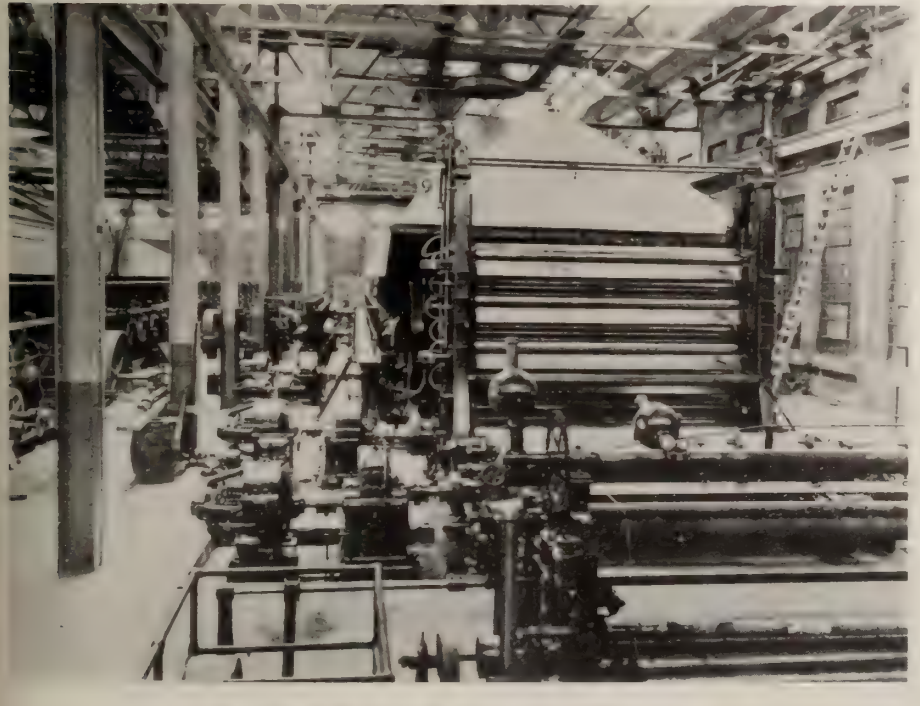
The reduction in freight rates will help. The better feeling that there is between labor and the employer will also help.

During the past few years Canadian manufacturers have taken up a vast amount of goods that have heretofore been imported, and the purchaser is finding the Canadian article equally as good, at a less figure, than that which he could import. The consequence is that a permanent benefit should result to the Canadian manufacturer.

Among the conditions that make it difficult for the Canadian manufacturer to supply the demand is our close proximity to the United States, where the manufacturers have such an immense market that they can manufacture a great variety of goods, and owing to such intimate connections between Canada and the United States, our trade demand practically the same variety. This means that our manufacturers have to split up their manufacturing into smaller units, which adds to the cost. Many of these varieties are really purchased as whims, and in many instances could be cut down, with profit to the manufacturer and saving to the purchaser. A steady campaign for Made-in-Canada goods will help this to a marked extent.

I think the outlook for the year 1922 will be very much better than for 1921. I consider conditions are more favorable, confidence is being restored, and the worst is over. We have had a very serious period of depression, but we are, apparently, on the upgrade. The people of Canada have shown their steadiness of character and their sterling qualities, and this country, with its boundless resources, without doubt will develop and increase its trade. If there is some adjustment made in the foreign exchange situation, I am satisfied Canadian producers will compete in the markets of the World successfully with other Nations.

INDUSTRIAL DEVELOPMENTS OF 1921 ILLUSTRATED



Installation of Mammoth Newsprint Machine

This is a view of the Abitibi Power and Paper Company's No. 5 machine, taken from the calendar stock end and showing the synchronous electric drive, the only one of its kind in Canada. During 1921 this company have installed three gigantic newsprint machines similar to the above, bringing daily production over 500 tons. A corresponding expansion has taken place in other departments.

Underlying Conditions Promising

By I. H. Weldon
Provincial Paper Mills Limited, Toronto

WHILE the paper industry has, during the past year, come through a period of readjustment and uncertainty, the book and writing paper mills have, perhaps, had much less disturbance and upheaval than mills manufacturing other grades of paper.

In the first eight months of 1921, business fell off considerably, owing to decreased demand, occasioned largely by the price fluctuation in many commodities, the trend towards general economy, the curtailment of general output, and the tendency to purchase only the quantity as required from time to time. With 1920 characterized by unusual activity, many plants found themselves, in January last, loaded up with materials bought at the peak of high values; and, until these supplies were consumed, the manufacturer had to absorb the loss and adopt a conservative policy in regard to acquiring a further supply of pulp, rags, and waste paper stock.

Generally speaking, the supply of all raw materials during 1921 has been ample. The quality has improved somewhat, and prices fell to a considerable degree; but not in the same proportion as the finished paper. It would not appear as if the bottom would be reached for a considerable time yet on almost all grades of raw material. In fact, the prices on some lines of stock have advanced slightly within the last thirty days; and with the curtailed production with most of the pulp mills during the winter months, and the depleted stock at the converting mills, it is reasonable to suppose that these prices will materially advance before the spring of 1922.

With regard to the market on book and writing, it would seem that the present prices have about reached the minimum for some time, for the reason that manufacturers are unable, with their present costs, to make any reduction, and the fact that there is an increased demand, sufficient to enable mills to run to capacity. There are, of course, some special grades of paper which, in all probability, will be lower.

Practically all of our output is sold in Canada, only a small percentage being exported. During the first six months of 1921, Provincial Paper Mills, Limited, averaged about 80%. The demand, however, for the last half of the year so improved that it enabled us to run about to capacity. The outlook for 1922 is improving all the while, and there appears to be a strong tendency to stabilzation of prices and production. It is believed that the coming year will be one of increasing volume; and, while no boom may be launched, the underlying conditions are more promising and hopeful. No one desires to see a runaway market or the abnormally fictitious characteristics which developed during 1920. Conservation and stabilization are the steadying influences required to restore confidence and equilibrium.

INDUSTRIAL DEVELOPMENTS OF 1921 ILLUSTRATED



New Paperboard Box Industry in Maritime Provinces

This plant at Glen Falls, just outside of St. John, N. B., originally erected as an assembly station for the Ford Motor Company, was acquired in 1920 by Clarke Bros. Paper Mills, Limited, subsidiary of Clarke Bros., Limited, Bear River, N. S. It was remodelled and equipped for the manufacture of fibre board and corrugated and fibre board boxes, made from kraft pulp manufactured by Clarke Bros. at Bear River, and operations were commenced in 1921. The plant, consisting of two buildings, has a total floor space of 36,000 square feet and is equipped with modern machinery.

Labor has been abundant and efficient during the year, and there has been little unrest among the employees. From an employment standpoint, there has been little to complain of, and we have been able to retain our full staff at our various plants during 1921.

Summing up, I would say that the undercurrent of business sentiment is good, and that there is really no reason for any depressed feeling in the paper trade. We feel that 1921 has been very satisfactory; and with optimism, co-operation, and confidence, there will be a decided improvement during the coming year.

Outlook for 1922 is Fair

By J. Leonard Apediale

Price Brothers & Co., Limited, Quebec

ALL raw materials required in our industry, have been materially reduced in prices; supplies are easier with quality about the same. Prices are much lower than a year ago, but we are unable to say whether the bottom has been reached or not.

Labor conditions are very much better than a year ago. The employee is more efficient, and wages have come down quite a considerable extent.

Markets have been weak for our commodities, and there is not very much improvement to be noted in the demand. The trend of prices for finished products during the year, has been downwards, and we are not sure whether the process of deflation has been completed.

High freight rates are affecting our business; and we believe that as soon as these are reduced to a proper extent, goods will be more readily moved. The manufacturer realizes that the period of extravagant operating, when larger profits forced him to produce over normal capacity, is gone. He is settling back to economic conditions of production, in which he is assisted by reductions in wages and increased efficiency of labor, both of which are helping him to work off his high-priced raw materials. If these improved conditions continue, and inventory values are conservatively adjusted, we feel that the outlook for 1922 is fair, the weakest part of it likely being the low prices for finished product, which, however, will, during that year, so adjust themselves that 1923 will be more on the lines of a normal year.

Market has been Restricted

By F. J. Campbell

Canada Paper Co., Limited, Windsor Mills, P. Q.

THE pulp and paper industry is always faced with a special hazard in the fact that their chief raw material, wood, has to be arranged for from one to two years ahead. Owing to the sudden falling-off in business, practically every company in the industry finds itself loaded up with a large stock of high-priced wood. Until this stock has been liquidated the cost of raw material cannot be sensibly reduced.

Wages are coming down and must come down further with falling prices. On the other hand improved efficiency is enabling many manufacturers to keep up a higher rate of wages than they had expected would be possible.

The market throughout the year, has been restricted but has shown some seasonal improvement this autumn, further improvement seems unlikely.

Prices have come steadily down, but the bottom can hardly be reached until raw material and transportation costs have been reduced. Transportation is a heavy item in this industry, as about 4½ tons of raw material go into the mill for each ton that comes out.

It does not seem to us that much general improvement in business can be looked for until the world situation settles down to something more approaching normal conditions.

Back to Normal by Fall

By H. F. E. Kent

Kinleith Paper Mills, Limited, Toronto

RAW materials, during the past year, have been reduced to such a low level that they are now, in many cases, actually below replacement prices, and there has been no difficulty in getting all the raw material required. In view of the extremely low prices now ruling, there is no doubt that prices will advance more or less when the old stocks are exhausted.

Labor conditions have been much more satisfactory than they have been for several years. Men have been more efficient and more productive. Wages have been reduced about 30%.

There was practically no demand for book and writing papers during the first six months of the year, mills only running about 50%. About the first of July the demand increased, and has been steadily increasing since that time, so that it is now up to about 80%. Customers, however, at the present time, are not buying in usual quantities, and, therefore, in view of the smaller runs, the cost of production is increasing—which, of course, will be overcome when the demand increases. Prices of our product have dropped about 30% to 50%, according to the grade.

There is no doubt that the very high freight rates have had a great deal to do with the increased cost of manufacturing paper, as most paper mills take in about three cars of raw material in order to ship one out; and, as freight rates gradually recede, prices of finished paper will recede, and should, therefore, help to increase the sale.

The outlook for the coming year is very favorable. Stocks are very low, and there should, therefore, be considerable movement from now on; and if we have as good a crop in the West next year as we hope for, business will be back to normal by next fall.

Improving Conditions are Evident

Views of Large Manufacturer of Lumber and Paper

OUR wood supply during the past year has been adequate, with any quantity available and at lower prices. I think the bottom has been reached so far as the price of wood is concerned.

We have also had a plentiful supply of labor. While the number of experienced men is limited, there is no question but that labor is more efficient than last year. Wages are back to the basis of 1919, representing a decline of 17½ per cent. Further declines may be looked for.

There was a considerable slackening in demand for pulp and paper during the past year. Improvement became noticeable in October and demand is now much better than it was at the first of the year. The price

trend has been distinctly downward and, while there is no sign of any early increase in the price of paper, I think the bottom has been reached and present levels will be maintained.

In lumber, there was practically no demand until quite lately. To-day, there is a much better feeling in the lumber market, though this is not based on any greater movement. Despondency has been lifted and all look to see an improvement, both in demand and price. The statistical position of the market is unquestionably strong, with stocks low and with very few logs being taken out.

High freight rates have undoubtedly had an effect on the movement of lumber and a substantial reduction would help very much. Even the small decrease already in effect has had a beneficial influence.

There are two good reasons for hopefulness. One is found in the liquidation of inventories which has taken place; the other in the statistical position. High-priced raw materials have been absorbed and stocks of manufactured goods are light. Industry has received some hard knocks but is still in the ring. There may not be any great improvement in 1922 but the worst is over and from now on there should be a gradual recovery.

Market Conditions Satisfactory

By Geo. Carruthers

Interlake Tissue Mills Co., Limited, Toronto

WE are having no difficulty in procuring pulps, and other supplies, but prices are not lowering as rapidly as we believe they should. The fact that there is still considerable high-priced wood yet to be consumed, no doubt, accounts to some extent, for the slowness with which the prices of pulps are being lowered, and while the bottom has not yet been reached, we are under the impression that from now on, any reductions which take place, will be gradual.

We have been able to maintain our full crew at the mill. We have made two ten per cent. reductions in wages, but employers will hesitate to make further reductions, knowing that the cost of living, particularly rent, is still fairly high. We are pleased to report, however, that labor is very much more efficient, than it has been for some years.

Market conditions with us have been entirely satisfactory for the past four months. We expect that there will be a slight falling off, between now and the first of March, at which time, we think there will be a gradual return to normal conditions. The process of deflation will continue, but we are under the impression that in our business, the bottom has nearly been reached.

There have been substantial reductions in prices for paper during the past year, and we believe that we are approaching rock bottom. The changes that take place between now and next midsummer will likely be gradual.

Freight rates have certainly interfered with our sales, particularly those to remote parts of Canada. The reductions which have just come into effect will help, to some extent,—but we feel that they are still too high.

There is nothing seriously wrong with Industry today, except a general return of confidence, which will cause our factories to increase their volume of production to a more normal basis, thus relieving unemployment, and incidentally increasing the purchasing power of the people, as a whole. No doubt, adverse exchange conditions have interfered with our export sales, but on the other hand, they have served as a protection to us in some lines.

We look for a general improvement in business commencing about the first of April, particularly in Central and Eastern Canada. We are aware, however, that the low prices for 1921 crop, will interfere with business in the West. We find that there is a general feeling of hopefulness abroad, which will, no doubt, have a beneficial effect on business generally.

Stationery and Envelopes

By Geo. H. Scott

Barber-Ellis, Limited, Toronto.

IN reviewing business in the envelope and stationery trade during the year just passed, we have found that conditions proved themselves to be far more favorable than we could have expected from the way they opened up during the first part of the year. At that time we passed through a period when it was difficult to interest buyers, particularly in Ontario, either in new offerings or in filling out stocks already carried, owing to the fact that retail business was not good and prices were steadily on the down grade. This state of affairs continued into the month of August. Then a slight improvement became noticeable and since that time prices have stabilized to an extent which has resulted in a loosening up on the part of buyers.

Raw materials have been fairly easy to obtain, deliveries coming regularly and quality being quite up to, if not better than pre-war standards. Prices, although they have declined somewhat, have not dropped to the full extent that was anticipated. We do not think that the low level has been reached yet but further reductions will no doubt come gradually and will not be a materially disturbing element.

The labor situation has not been an easy one to handle. Although the supply has been ample and of good quality, it was not always possible, owing to the variableness of trade, to keep help constantly employed. New operatives taken on had to be trained, resulting in a distinct loss of production and advanced labor cost, tending to increase prices when they should have been decreasing. Wages have been lowered somewhat, steadier employment toward the end of the year inclining the worker to accept reductions more readily.

With the comparatively stable market confidently looked for in the New Year, we will doubtless be enabled to lower production costs and consequently, selling prices. This, together with lower freight rates, we believe will react beneficially in stimulating trade. From the present outlook, we have every reason to hope that the coming year is going to bring us a good flow of steady business.

Briquette Mill is Successful

After several tests the plant constructed by the Lignite Utilization Board at Bienfait, has had a successful run of powdered unscreened coal through the carbonizer resulting in the production of satisfactory briquettes, according to the report of J. M. Leamy, a member of the Board. No decision has yet been reached regarding continuous operation of the plant.

INDUSTRIAL DEVELOPMENTS OF 1921 ILLUSTRATED



New Pulp Mill of the Canadian Paperboard Co. Ltd. at Frankford

The Canadian Paperboard Co., Ltd., was organized towards the close of 1920, succeeding the Northumberland Paper and Electric Co., Ltd., Campbellford and the Canada Boxboard Co., Ltd., Montreal and Frankford. One of the first developments of the new company was the erection of the modern 35-ton ground wood mill, illustrated above. Its production is used by the company in its paperboard plants at Campbellford, Frankford and Montreal. The mill cost in the neighborhood of $150,000. It is a one-storey stone building with concrete floor and roof, and as nearly fire-proof as possible.

The Musical Instrument Industry

Plants Busy, Outlook Encouraging

By W. N. Manning
The Sherlock-Manning Piano & Organ Co., London

WE have no difficulty in securing raw materials and the quality has considerably improved. The war and supposed shortage after the war can no longer be given as reasons for falling down of quality. In only a few lines has there been any decided decrease in price. This decrease has little effect on the wholesale price of pianos for the reason that during 1920 pianos did not advance in price to correspond with the ridiculous advances in raw materials. On our special lines of hardware the reductions in price will run from ten to twenty per cent and on these lines we do not think the bottom has yet been reached.

Wages with us are now at the January 1919 scale. Most of the men in our employ were very fair during the unusual conditions imposed by the war and for the two years after. Efficiency was fairly well maintained and the men have shown a decided tendency to adjust themselves to present conditions. As practically every man with us has to be an expert we cannot immediately take advantage of the surplus help now being offered. In many operations it takes from a year to two years before a man is efficient and we hesitate taking anyone on unless they are satisfied to devote that much time in preparing themselves. For this reason the output of our factories is very often limited to the efficient help we can get.

The state of our domestic market is very much better than a year ago. At that time the dealers throughout Canada were carrying large stocks as it was not until late in November that there was any decided indication that the usual Christmas trade would not be secured. In December retail trade in many places practically stopped, so that this meant the dealers had to carry over very large stocks of pianos. Many dealers in the western and eastern Provinces had hundreds of pianos. In many cases owing to the slowness of trade this carried the dealers for six months of 1921. January was bottom as far as output was concerned and we are glad to say there has been a steady improvement and right now we are experiencing an old-time Christmas demand. Both our factories are running full time. In one factory the output is in excess of 1913 and in the other factory the output is greater than it has ever been. October shipments were the largest of any previous month in the fifty years history of the factory and November exceeded October and we have every indication that December will be better still.

Our export trade is reviving. Since April we have had monthly shipments for New Zealand and these are increasing each month. There has been a little trade from Australia and some from Great Britain and the West Indies but we have had no orders from South Africa this year although we are advised some may be expected later.

There were no inflated prices in regard to pianos as was the case of practically all other commodities so that prices cannot deflate. The increases in the price of pianos only provided for actual increases in cost. Therefore, reductions can only apply as reductions occur in cost of material and labor. Prices have been reduced but it is impossible to cut prices of pianos in two as has been the case of some articles. Perhaps the most serious condition in the piano industry has been the unreasonably high freight rates, coupled with the Government luxury taxes that were imposed in 1920. There is no doubt the public resented both of these and, if the Government had not cut out the luxury taxes in December of last year, it would have been a very serious matter for the piano industry. The damage was great and it has taken months to recover from even that blow. We believe the greatest need for adjustment in any one particular line just now is that freight rates should get back to normal. We realize that to do this wages of railroad employees must also come to somewhere near normal.

The outlook for 1922 is much better as we see it than it was for 1921. Dealers are not carrying large stocks and, while they are ordering small quantities, they are ordering often and while there is considerable talk of unemployment the great majority of our public are working and earning good money as compared with former times and our experience is that the aggressive piano man is getting business. More dealers are paying cash for their goods now than in all our experience. This demonstrates that they have in the times of good business piled up a reserve both in capital and credit that enables them to take advantage of every possible consideration for a reduction in price. We believe the worst is over as far as the piano trade is concerned. We do not expect after Christmas the demand will be as great as it is now but we have every confidence it will be considerably better than a year ago and we are looking forward to at least a normal year next year. We had very large inventories the beginning of this year. This stock has been worked off and it has really only been within the last month or so that we have had any advantage of the reductions mentioned above in our raw material. The piano trade has reason to be proud of itself in view of the way it has as a whole come through the past year.

Business on the Mend

By Henry H. Mason
Mason & Risch, Limited, Toronto

SPEAKING from our own experience, the demand for musical instruments has, this past year, been less than in 1920 or in 1919. The encouraging feature is that, since the first of September, there has been a steady improvement, the activity in October and November being decidedly marked. In December of 1920 there was a tapering off as compared with the previous year, so that we are inclined to feel that the volume of business for December, 1921, may be quite as good as that of a year ago.

Seeing that there has been so much improvement in the final months of the year 1921, we feel that it is reasonable to predict that 1922 will show a marked improvement over 1921.

We are now in a position to secure raw materials readily, and, while some of the prices governing these are somewhat reduced, this may be caused more by the advisability or necessity of reducing inventories than actual decrease in cost. In other words, the cost of raw materials may again stiffen with more active business conditions.

The conditions, as applying to labor, are more favorable, as it is not now so difficult to get efficient men. The reduction in the rates of labor in this particular line has been negligible.

On the whole, the music industry has come through a trying period very successfully, and has every reason to feel that the outlook for the future is bright.

Materials are Still High

By J. W. Alexander
The Dominion Organ & Piano Co., Limited, Bowmanville

THERE has been very little change in the price of the materials we use. Manufacturers of our raw materials seem to be holding the price up until they get rid of the stocks on hand bought at high prices, which is a mistake in our opinion.

We have made no reduction in our wages so far, as we feel that the cost of living does not warrant it yet. Our men are not as fully employed as they were a year ago, all brought about through high inland and ocean freight rates.

There is very little improvement as far as we can see in the market for our product.

Prices have been reduced somewhat, in order to stimulate business, but cannot be reduced further until raw material can be purchased at a more reasonable price.

Resumption of Building Needed

By Alex. Saunders
The Goderich Organ Co., Limited, Goderich

THE supply of raw material is fully up to the demand; the quality has somewhat deteriorated; and there will be a further reduction in prices before bottom is reached.

While labor is receiving and accepting lower wages than last year, no general reduction has yet taken place in industries whose activities have been below normal. When industrial activity is renewed, no doubt, either a systematic reduction will take place of the hourly wage, or a longer period will comprise the day's work if we wish to compete, particularly for foreign trade. We found labor very much less productive immediately following the war period; but conditions are slowly bringing production back to pre-war basis.

Owing to the excessive values of material and labour, there have been no building operations of any moment in Canada; and, while proper housing conditions are badly needed in all large industrial centres, no great improvement will be noted until values come to a point where loan companies feel perfectly safe in advancing money for their erection. When building is resumed, on a fairly large scale, it will improve the market in all lines of industry. In regard to export business, the main feature in retarding export trade is the abnormal transportation charges of both the railroads and the steamships. This, together with exchange conditions, have rendered all attempts abortive. But these matters are slowly righting themselves, and we look for an early resumption of export business.

The prices of finished products in most lines have reached their economic bottom: some recessions in certain commodities will take place, owing to the lower prices of raw material and labour. I do not anticipate a return to pre-war prices because of three causes, viz., prices of raw material, price of labour, and lack of production.

The effect of the increase of freight rates —as I stated above—has increased the cost to the consumer, who, in the final analysis, has to pay. It has also had the effect of driving our far Western customers to the U.S. for their supplies, the difference in freight charges compensating, in a measure, for the duty. Owing to the drop in prices of wheat and other farm products, the trade from the West has been very disappointing. While the crop has been good, the cost of harvesting has been such that, after paying his overhead charges, the western farmer, who is a good spender when he has it, finds himself, to use a common expression, "in the hole." I do not look for any large trade from the West until another harvest is reaped.

There have been so many disappointments during the past year that we would be foolhardy to predict future events from past experience. I have passed through many periods of depression during my lifetime, but do not remember anything quite so trying as the past twelve months. Many things have tended to emphasize the dullness of trade and prevent expansion, the primary cause being the world war, followed by a cessation of activities; the depreciation of currency; and the extravagant spending of Governments, millions being considered as lightly as thousands before the war. The period of deflation will take longer, and the bottom will only be reached when individuals and nations have taken their losses. The period of recovery, which will surely come, will be delayed more by the action of labor in not receding from the abnormal rates paid during the war period, than from any other cause. I am naturally an optimist, and see many signs of an early resumption of active buying.

Outlook Much Improved

By H. P. Bull

The Williams Piano Co., Limited, Oshawa

THE raw material market has shown many irregularities. Prices of some materials which made a substantial drop, are again turning upward. There were some satisfactory purchases in the lumber market, but this article is again increasing. Some other materials have not as yet reached the bottom in our estimation; others have. We do expect eventually, a downward turn, but no very drastic reductions.

Labor is holding out strong for higher wages than is consistent with the demand for reductions in costs, but we feel that labor requires a satisfactory wage, or it will have no purchasing power. The efficiency of labor cannot be at its best while production is low, but we believe that our labor is very earnest in its desire to produce better work.

The market for our product is greatly handicapped by the loss of the purchasing power of the farmer, which is almost nil. We are depending almost entirely upon the cities for business. We do not anticipate any improvement in the purchasing power of the farmer until he receives a better price for his product. His small 1921 crop and low prices have eliminated him as a purchasing power until he has another crop.

Therefore, we feel that the coming year will not give us any more than 60% of our high production point, which however, will be an increase over pre-war production.

The wholesale price of our product has not decreased over 10%, and even this reduction was not permissible, according to our costs of production, which are at the very highest point today that we have ever had them. The high cost is due to the fact of decreased production, which has made each instrument bear a larger proportion of overhead than was necessary on the large production.

The only possibilities we can see of reduced costs is through a general decrease in wage by the factories producing semi-finished materials used in our manufacture, and, if they were to pay a wage on a par with our direct factory wage, we would have those reductions. We know some of our supply houses who have not reduced wages, because they state the unions will not permit them.

We expect the reduction in freight rates to have an influence in the reduction of costs but it should require at least three months before benefit is fully effected. We believe the outlook for business is much improved, and by fall of 1922 there should be enough business for all industries that keep their organizations intact and are prepared to take advantage of the business offered.

We believe in the necessity of the general stabilizing of all foreign exchange, and some Government plan of arranging foreign credits. Our country must have export business, as we have developed into an exporting country. Capital is already invested in industries in Canada for exporting purposes, and that capital cannot very easily be withdrawn. Unless exporting is made possible, the overhead on this additional capital must be borne by our national trade.

Increased factory space cannot be scrapped. Bonds cannot be called in. Additional capital taken into the Business cannot be returned to the stockholders. It is easily seen that we are permanently into the export world, and we must go forward after the business. We look on the future of our country full of optimism.

More Inquiries Coming In

By J. E. Ritter

The St. Catharines Brass Works, St. Catharines, Ont.

THERE is a very good supply of raw material available and prices are approximately 20% lower on some materials than last year, but there is now a tendency upward.

There seems to be considerable more unemployment than last year and wages have come down in the majority of cases approximately 20%.

There seems to be a slight improvement in the market for our product and we believe that prices have reached bottom.

The writer feels very optimistic for 1922 and believes that the worst is over. Our reason for making this statement is that we have had more inquiries during the month of November, than in the prior six months. However, for the month of December, inquiries have not been so numerous, which we account for by the fact that the majority of our customers take inventory Jan. 1st, and naturally do not buy up any more material than is absolutely necessary. We look forward to a decided improvement in January over December.

INDUSTRIAL DEVELOPMENTS OF 1921 ILLUSTRATED



Canadian Manhasset Cotton Company Limited

This immense plant erected at St. Hyacinthe, Quebec, during the past year, marks the entry of a large United States firm into the Canadian field. The parent Company are located at Providence, R.I., where they manufacture high grade tire fabrics. Canadian customers are now supplied from the new plant. The plant comprises a mill building, weave shed, boiler house and fireproof stair tower. The mill building, 110 x 200 feet, with three storeys and basement, is designed with a view to extension to a total length of 500 feet. The weave shed is one storey, saw-tooth construction, 120 x 310 feet.

The Textile and Clothing Industries

The Cotton Textile Industry

By. F. G. Daniels

Dominion Textile Company, Limited, Montreal

THE extreme and wide fluctuations in the price of raw cotton during the past six years, were again a prominent feature of the year just closing Middling good staple cotton which, on the 1st of January, 1921, was laid down at a mill in Montreal for 14 cents per lb., dropped to 11 cents by March, fluctuated considerably during the early Summer, and, following a reduction in acreage, decreased use of fertilizer, boll weevil and drought, precipitated a market scare of large proportions which forced the price to 25 cents per lb., and is at the moment, approximately, 21 cents per lb., at the mill, exclusive of exchange and tax.

Owing to the drought, the staple is shorter and much more wasty than ordinarily, adding an additional 2% to 3% to the cost of cotton in the cloth.

We do not care to hazard an opinion as to whether the bottom has been reached, as so much depends upon world conditions, but raw cotton merchants and men in a position to size the situation up with reasonable accuracy, feel confident prices will be very much higher next Spring and Summer.

Wages in cotton mills have been reduced approximately, 15%, but, owing to the greater efficiency on the part of piece workers, this reduction has not been fully apparent in the pay envelope. I am not aware of the percentage of employment amongst other cotton companies in Canada, but, in so far as our Company is concerned, we have operated full time throughout the year, and are employing as many operatives to-day as we have had at any time in the history of the Company.

There has been a good and steady demand for our products throughout the year, and whilst orders on our books were reduced to a negligible quantity during the summer months, the day-to-day business was in such volume that we had little opportunity of replenishing our greatly depleted stocks. This would seem to indicate, at least, a shortage of goods in distributors' and retailers' hands.

Prices declined steadily from the 1st. of November, 1920, until they had reached a point where, considering the increase in wages, taxes, cost of supplies, etc., many lines were selling considerably below a pre-war basis. Since the rise in the price of cotton, there has been a compensating rise in the price of goods, which, from now on, will fluctuate with raw cotton and wages.

Any improvement in general manufacturing conditions must, we think, be preceded by a reduction of freight rates, tending to reduce the cost of living, bringing with it, of course, a reduction of wages. It would be most undesirable, however, to have such reductions reach a point where the railways could not be maintained on a reasonably profitable basis, or, at the expense of a reasonable standard of living for the worker. On the other hand, a reduction in freight rates would have immediate and direct effect upon the cost of marketing farm products, giving the farmer an opportunity of obtaining a price for his commodities that would again make him a factor as a buyer and consumer.

With regard to the outlook, we feel that the year 1922 as it progresses, should show a decided improvement in manufacturing conditions throughout the world, and, particularly in this country. Generally speaking, stocks of manufactured goods are low, although, in certain sections, there is urgent need for price reductions to bring about liquidation of stocks that may be considered to-day as "frozen," due to the fact that prices asked are considerably above replacement. It seems apparent that European conditions, from a manufacturing point of view, are righting themselves, and should make much more rapid progress during the coming year. It is to be hoped that this will be seen as, of course, neither Canada nor any other country, can hope to carry on business for any lengthy period upon a sound basis unless the conditions are such that its people are fully employed and governed by a safe and sound policy.

Demand on the Increase

By E. A. Robertson

The Montreal Cottons, Limited, Montreal

THE Canadian market, as a rule offers an outlet for as much and more than we can produce in our various lines. As a result of the general stagnation in trade during the first six months of the past year, it was impossible to market our output in Canada or elsewhere, but an improvement in demand was felt in July and increased gradually until September, when, to the natural increase resulting from the necessity of replenishing stocks which, generally speaking, had become seriously depleted, there was added the desire to cover, because of the condition and increasing price of raw cotton. This demand was not superficial, but has since been very well sustained, to the extent that for some time past our mill has not only been operating at full capacity, but overtime in several departments.

The outlook is decidedly promising and for 1922 we look for a steady and gradually increasing demand for merchandise.

The Woollen Industry

By W. Tinker

Canadian Woollens, Limited, Peterborough

THE market for raw materials during the past year has been in an excellent condition. No trouble has been experienced in obtaining adequate supplies at all times. Prices are lower than a year ago, although there has recently been a stiffening in the wool market, which many buyers think is a temporary one. It is very difficult to predict whether the bottom has been reached in the lower qualities, but the medium and fine qualities, especially the latter, are still too high. This was shown by the reduction in price of the fine qualities during the last week or so.

Labour has been excellent from the manufacturers' point of view. There has always been a plentiful supply, and lower wages have prevailed than a year ago. Reductions of about 20% have been made during this year, which is, of course, not adequate compared with the reduction in the cost of living. There is, however, a humanitarian point of view to be taken of the labour situation. While it is true that the cost of all goods and clothing has been reduced, rents and fuel, particularly the former, still remain at a high level. Although further reductions in wages are inevitable, rents and fuels should be reduced likewise. Manufacturers who own the houses in which their employees live, can set a splendid example in this respect.

The markets for the products of cloth and yarn manufacturers during the first six months of the year were stagnant. Jobbers and manufacturers had not recovered from the slump, and the salesmen required to be particularly hard workers to secure enough business to make the running of mills worth while. During the last six months, however, there has been a distinct improvement, especially in the yarn trade. The knitting mills are very busy just now, and the outlook for the future is very hopeful. Just as soon as the enormous stocks of cloth and clothing are consumed, there will be a very decided improvement in these departments also. In the meantime the cloth mills are merely running from hand to mouth, and practically are all on novelties.

The trend of prices during the past year has been downward, very decidedly so. Just how far they can fall is quite a problem, to which no one is qualified to give an answer, but before any further reductions can be made, labour costs must be reduced. All further reductions depend entirely on this fact. The high freight rates we have experienced recently have had an effect upon industry, although not a very oppressive one in the writer's opinion.

Business in the future depends a good deal upon our ability to produce goods which will be placed in the hands of the consumer at pre-war prices, or as near as possible. The public know that prices of raw materials have been reduced, that their own wages have been cut, and they are looking for large reductions in the prices of all commodities. The manufacturer has reduced his prices as shown by the balance sheets recently issued by the large manufacturing concerns in Canada. The jobber has also reduced his prices considerably. Many retailers have followed suit, but there is still much room for a further depletion in the retailers' prices.

The writer is very optimistic regarding 1922. The worst is about over, and confidence in the future, which was so sadly lacking twelve months ago, is again being slowing restored.

More Employment in 1922

By I. Bonner

Penmans Limited, Paris

IN looking back over the past year one is struck by the very drastic fluctuations which took place in the raw material markets and consequently in the selling prices of knitted fabrics. It is also quite evident that many manufacturers did not look for such surprising drops in values when taking 1920 inventories, and an evening up of losses will have to be taken care of in 1921 inventories.

In the raw material market wools received their full share of the decline, in many cases the prices being cut in two, although the finer sorts stood up better than the coarser grades. Raw cottons also did some gymnastics in violent ups and downs until now these are selling at about 90% above pre-war prices, and are likely to hold thereabouts until new crop prospects are in sight. Raw silk dropped about 50% in the early months of

the year, but has since seen an upturn which is not likely to be maintained.

In manufactured goods the first part of the year saw a very stagnant market in nearly all lines of knitted fabrics, most of the mills being shut down from one to five months according to the class of goods produced. The latter half of the year saw quite a revival in demand for the finer qualities and some mills during the latter months were running to capacity on finer lines, while the coarse goods such as lumbermen's supplies remained dead, largely due to the quietness in the lumbering industry, coupled with the large carry-over of such goods from 1920.

It is evident that a good clearing out of surplus stocks is taking place as is evidenced by the fact that last summer nearly all the light weight goods were cleared from the dealers' shelves, with the result that good spring 1922 business has been general throughout the trade. In the heavier or fall lines it will require the present winter season to clear the dealers' stocks which should mean good business for fall 1922, and the trade should look forward to more activity.

The supply of nearly all raw materials seems unrestricted at present prices but what these prices will be in the near future is problematical. Raw cotton, due to manipulation, is likely to go up or down on any pretext, and particularly as long as such unreliable government statistic reports are issued on condition and size of crops. In coarse wools one is inclined to the belief that the bottom has been reached, while in the finer grades there is reason to look for slight reductions from time to time.

Labor in the textile trades seems to be fairly well employed, except where a mill's product is heavy woollens, and wages are well maintained at from 20% to 25% below 1920 rates. The requirements of the trade should improve and 1922 should see more employment after fall bookings are in.

The Whitewear Industry

By J. B. McCarter
The Eclipse Whitewear Co., Limited, Toronto

THE whitewear business is in a rather peculiar position, largely owing to prevailing styles in female dress. As a result of the reduction in raw material, we are selling our goods on an average of one-third less than last year. Even at that, business is somewhat slow. Raw material market prices are about half what they were a year ago. Labor conditions have not changed to any material extent, but in the last month or two, help is getting more plentiful.

The outlook for 1922 is not any more hopeful, in our opinion, than it has been for the last six months.

Outlook is for Fair Business

By A. T. Reid
A. T. Reid Co., Limited, Toronto

WHAT raw materials we use in the form of piece goods are of course the finished product of the silk, cotton and woollen industries. There has been no shortage of supply in any direction where we are interested, although prices have been more or less fluctuating, with the tendency constantly downward. We believe in respect to silks, and perhaps cotton goods, that bottom prices have been reached and that any change will show an upward turn. In artificial silk and spun silk yarns, both of which we use in considerable quantities, the prices appear to have reached bottom and are now showing firmness with an upward trend.

Throughout our various factories we have employed about as many people as a year ago with no diminution in wages; increased remuneration, however, has been quite the exception. In respect to efficiency, we have nothing to complain of; rather an improvement in this direction over a year ago.

A rather unsettled and hesitant feeling has prevailed throughout all of the past year in respect to buying. Eighteen months ago merchants were placing orders with great freedom and for future delivery. The pendulum during the past year has swung quite in the other direction and the prevailing tendency has been to defer buying so long and to such an extent that the more recent demand, in some directions, for certain merchandise has been in excess of the ability of the manufacturer to produce and make deliveries in time for Christmas selling.

In most of our departments we believe that rock bottom has been reached insofar as our finished products are concerned. It is our belief that the process of deflation has run its course and that, other than ordinary variation brought about through lessened or more quickened demand, prices have become measurably stable.

In view of above we believe that in Canada the outlook is favorable for a continuance of fair business. It is our opinion that, speaking generally, stabilization of prices of textile commodities will not be obtained until the chaos existing in European and international finance is removed, for as now a certain element of speculation is thrown into the field of business that did not formerly exist because when one buys to-day he does not know what the goods will cost him when delivered and paid for on maturity of obligation, owing to exchange variation.

Gradual Improvement Anticipated

By J. A. Burns
The Monarch Knitting Co., Limited, Dunnville

DURING the past year, we have been able to secure ample supplies of most of our different classes of raw materials. Prices are now considerably lower than they were in the early part of 1920, and we believe that they have reached the bottom.

We have operated at about 75% of capacity throughout the year. Wages have been reduced about 25%. We find that labor is much more efficient.

During the greater part of 1921, our customers were making a special effort to reduce their inventories, and were placing orders to a great extent for immediate delivery. We now find a considerable improvement, and customers are placing future orders. Our orders on hand at the present time for future delivery are considerably in excess of this time last year.

We believe that prices for raw materials are now in such a position that we are likely to see an upward tendency in prices for finished goods.

We believe that jobbers and retailers have during 1921 liquidated their heavy stocks of

INDUSTRIAL DEVELOPMENTS OF 1921 ILLUSTRATED





Views in the Plant of the Milton Worsted Yarn Spinning Mills, Milton, Ont.

This company acquired a building in Milton, which they remodeled early in the year and fitted up for the manufacture of worsted yarns, with an initial output of 3,000 pounds a week. They also erected a dye house, equipped with all the latest and most modern machinery, in which they dye all their own yarns. Enough property was secured when the building was purchased to admit of the extension of the plant as the requirements of an expanding business may direct. The plant has been running night and day for the past four months and everything points to a prosperous 1922.

knitted goods, and unless they anticipate their requirements, we feel sure that there is likely to be a great shortage, as we believe that the policy of all manufacturers will be to make up goods only to order. We therefore believe there will be a gradual improvement in business throughout 1922.

The Knit Goods Industry

By H. G. Smith

Mercury Mills, Limited, Hamilton

IN our opinion general conditions are improving gradually, and the trend toward improvement should continue at least throughout 1922. If there are no radical tariff changes in view, we feel that, as the stocks in the hands of wholesalers and merchants are not heavy, there should be a steady volume of business in knitted goods. The prices of raw materials have in general been fairly well stabilized and are now a long way above the low point which was reached some months ago.

It was impossible to do any export business during 1921 in knit goods. The reason for this was the fact that importers were loaded with high-priced merchandise which had to be cleared out at very heavy losses before they were in a position to come into the market again. In the last few weeks, however, inquiries have been received, and actual business has been transacted, for immediate shipment. You will understand that it is only possible to export certain kinds of knit goods from Canada, and in our opinion the export market for these lines will be satisfactory during 1922.

If European Countries were in a better financial condition so that they could buy there is no doubt that substantial push would be given to business generally. Our own opinion is that the situation is working out as well as can possibly be expected, and recovery has taken place first in those lines in which the losses were taken most quickly.

Labor efficiency has increased to a very marked extent. In our own case an average reduction of 15% has been made in wages.

We would hardly think that money tightness has impeded industry. The industrial situation has been governed by the ability of the market to absorb goods—money tightness or exhaustion of credit no doubt had a large effect in bringing down prices from the extreme levels to which they had climbed. Both cotton and raw wool dropped to levels which were in some cases below the average pre-war prices. Since then there have been marked advances in both materials. We believe, therefore, that conditions in the knit goods industry may now be considered more or less normal.

We might add that as wholesalers and merchants delayed buying for so long, it is now impossible to cope with the demand for goods required for immediate delivery, even while running the factory night and day as we are at present doing.

Confidence has Been Established

By H. Quarmby

The Guelph Carpet & Worsted Spinning Mills, Limited, Guelph

TEXTILE manufacturers have passed through a most trying and disappointing year. The inability of many people, as well as the unwillingness of the general public, to purchase, had effect, and although we made a great effort to secure sufficient business to operate our factories at full capacity, we found it impossible to do so; in fact, the carpet plant ceased operations for a period of 11 weeks, and the worsted spinning mill operated only 3 days per week for three months.

Conditions, however, improved very considerably about two months ago, and we are now operating at full capacity. Nevertheless we feel that a big portion of the business placed should have been booked six months ago, as we are being pressed for delivery of goods, which shows distinctly that merchandise is badly needed.

Wages have only been reduced 12½%, but our employees are giving us a higher rate of efficiency than ever before, and they fully realize that only by giving us the maximum production can wages be kept up to the present standard.

Our yarn prices have been reduced 55%, and carpet prices 40%, and we feel that no further reductions can possibly take place.

Our opinion is that business conditions during the coming year will be quite satisfactory, as confidence has again been established, and we are facing the future most cheerfully.

Have Reached the Bottom

By O. Butler

Canadian-Connecticut Cotton Mills Ltd , Sherbrooke

THE supply of raw material during 1921 has been normal and the quality also normal. Prices, as compared with a year ago, are lower. I do not think the bottom has been reached.

We have approximately 20 per cent. less employed at present than a year ago but wages have not been reduced. Labor efficiency is improved somewhat.

There has been no improvement but rather a reduction in the demand for our fabrics. We do not think prices have reached rock bottom nor that the period of deflation has been completed, especially in our line.

Our views regarding the outlook for 1922 are that we have reached the bottom and that a slow but steady improvement should be noted for 1922, primarily because the tire industry, as a whole, will have had an opportunity to reduce and charge off inventory values, thereby getting them nearer to a market basis.

Outlook Shows Improvement

By W. A. Brophey

Tooke Bros. Limited, Montreal

OUR principal raw material is cotton and of this we have found the supply satisfactory. We are able to get deliveries more promptly than for the past five years. Prices dropped to quite a low figure about six months ago, as compared with the previous year but about three months ago prices stiffened up from 15 to 25 per cent. on all leading lines of cottons. We do not think the bottom has been reached and rather feel that there will be a lowering of prices as time goes on.

There is no trouble regarding the labor situation. Wages have been reduced from 10 to 15 per cent. in our industry and efficiency is very much improved over previous years.

There is not much improvement in the demand for merchandise. There seem to be quite a lot of our products on the market being offered at clearing prices. The trend of prices on the finished product is lower than it was a year ago but we think it has reached rock bottom for the time being or until another cotton crop has been garnered. A plentiful supply of cotton, with lower wages in the mills, might mean a slightly lower range of prices for our finished product but for the next six months we cannot see any change in the selling prices of the lines we manufacture.

In our estimation, the outlook in certain parts of Canada shows an improvement over the past six months. Our representatives have had a very fair spring trade, quite up to our expectation. With good delivery of spring orders, this should result in an extra good sorting business in the late spring and summer. An improvement in the unemployment situation would help to inspire more confidence and create a better demand for merchandise of all kinds.

A British Columbia Viewpoint

By Jas. B. Thomson

Jas. Thomson & Sons, Limited, Vancouver

IN December of last year the price broke very severely in the cotton textile market. and a heavy decline occurred which was a very serious matter for those of us who had stocks on hand. We had to immediately reduce our valuation of this material to replacement value with a resultant loss gauged by the amount of material we held. The supply up to that point had been limited. the demand being much greater than the supply With the break, the position was reversed and both from foreign and domestic sources there was an ample supply of materials offered.

The decline in the price of cotton textiles was very rapid and existed until well on in July when the shortage in the American crop became known, and the price advanced to approximately 25% to 30% higher than existed in December 1920. Personally I do not look for any great change in the price of cotton goods until a reliable estimate can be forthcoming of next season's crop, unless some unexpected national condition arises which might be reflected on the market.

Regarding woollen goods, the decline has been very great and there has not been much deflation in price since the deflation period in this commodity. The indications are, I think. that we can look for further declines owing to the reduction effected in wages, especially where imported supplies are concerned.

I do not think that the bottom price has been reached in the commodities we produce but I think we can safely assume that the raw materials from which the textiles are manufactured are as low as they will be for some time. The price of raw wool is lower to-day than pre-war, but before the public can get cheaper goods, labor will have to subscribe its quota in a more marked reduction that what has taken place to date.

With reference to labor, we have had a sufficiency to meet our requirements this year in our overall and shirt factory. This we operate under the union schedule, and as you are no doubt aware, there has been no reduction on the schedule of prices of the United Garment Workers. I must state, however, that there has been a marked improvement in the efficiency of the labor. We now also operate a factory in which we produce ladies' underwear, house dresses, aprons, etc, This is not a union shop, and is under a distinctly different condition from our union factory. We have only been operating this a few months, but find there is a good demand for our product, and feel that we have a great field for future development in the manufacturing of ladies' garments.

The first few months of the year we found business a great deal quieter in men's wear which was reflected immediately in the sale of our products in overalls and shirts. However, there is no question but that for the past six months the majority of industries in British Columbia have been functioning to almost full capacity, and this has been reflected in our being able to market a fair proportion of the products of our plant. Of course, through the discriminatory freight rates existing from Vancouver eastward, we have not a fair deal in being able to market in competition with Eastern producers even within the confines of our own province.

This matter is before the Board of Railway Commissioners, and they are hearing the application of the Government of British Columbia in this matter. We look forward to being able to satisfy the Board of Commissioners that we, in common with other manufacturers, are not receiving equitable treatment in the entree to markets which are justly ours for distribution.

Regarding the outlook for the future, I feel sure that there are none but optimists in British Columbia, and with the great heritage we have in natural resources, if we are allowed to continue to develop them in a proper manner, conditions in British Columbia have every indication of being very good in 1922.

The Underwear Industry

By James Moodie

J. R. Moodie & Sons, Limited, Hamilton

WE have no trouble whatever at present, in obtaining a supply of materials used in the manufacture of our goods. The price of cotton yarn today is about the same as that of a year ago, and we do not look for lower prices.

The supply of labor in Hamilton is very plentiful at the present time. The wages have not been reduced in connection with our own company; but, when it comes to the question of replacement, we believe that slightly lower wages are being paid than what we paid a year ago. We have every reason to believe that the labor is more efficient today than it has been for some time.

The sale of goods today is a very erratic affair. Buyers do not place orders ahead, as formerly; and, if a manufacturer wants to keep his sales up, he must carry a considerable stock of goods, so that prompt shipments may be made. That is our experence.

The price of cotton underwear is very similar to or a little lower than that of a year ago. Some very attractive all-wool lines are being offered for next year at reasonable prices.

It is a very difficult matter to express an opinion as to the outlook for the year 1922. From information we receive, we do not believe the stocks of underwear, throughout the country, are heavy; and, if the wholesale trade and retail trade will not place their orders ahead, as formerly, it means the manufacturer has got to run on speculation business, and take the chance that, before the year is over, his stock, thus manufactured, will be sold.

Market Has Been Good

Opinion of Prominent Manufacturer of Underwear

WE have been able to get a sufficient supply of raw materials of good quality. Prices in some lines are practically the same as at the beginning of the year; in the case of other materials, fifteen per cent. lower. We think that the bottom has been reached.

Employment conditions have been very good and we now have a chance to make selection of our help. Wages have not come down, but we get greater efficiency from labor.

The market for our line of goods during the past year has been very good: in fact, demand has equalled our production. The trend of prices for finished goods has been downward and we believe they will be at rock bottom by the end of 1921. We consider that the process of deflation has been practically completed. Freight rates do not affect us to any great extent, but we feel that the lowering of the same will help very materially in bringing down cost of material, particularly building.

As to the outlook for 1922, we think that the worst is over and we expect improvement to set in at the beginning of the year and continue on from there.

The Overall Industry's Outlook

By C. F. Fell

Hamilton Carhartt Cotton Mills Limited, Toronto

RAW materials to-day are much easier to secure than they were during 1920, and the prices we are paying to-day are practically half what they were when they reached their highest peak in August last year. There has been a change upward in the cotton market in the last four months, and we ourselves feel that there will be no material change made either upward of downward in 1922.

Labor is much easier to secure, and is to-day more efficient than we have found it in the past three years. As regards our own industry, we have not made any changes whatever in the rate of wages, the scale being the same to-day as it was during 1920. Our finished product is to-day selling at one third less than it did in 1920, and we see no chance of the price going lower unless labor is materially reduced.

As the cotton crop has been smaller than any year since records have been kept, we expect there will be a great scarcity of these goods next Spring, and considering that prices are always based on supply and demand we feel that there will be very little change take place in the cost of our finished product.

The outlook for 1922 is much brighter than it was a year ago; in fact we have booked a nice amount of Spring business, and have reason to believe that the goods purchased will be wanted at time of shipment; investigations have proven that the average storekeeper has hardly sufficient on his shelves to meet the ordinary every day demand.

The employment situation will improve with industries opening up and building operations increasing, and such being the case, men will be obliged to equip themselves with proper work clothes, and the demand will be increased as the employment situation improves.

The Shirt and Collar Industry

By F. W. Stewart

Cluett, Peabody & Co. of Canada, Limited, Montreal

THE supply of raw materials is better than for sometime, but certain qualities of cotton materials are scarce and are very difficult to secure. Prices compared with one year ago are lower, but have advanced 15% to 20% from the lowest. I consider that there will be a lowering of cotton prices in the near future.

The condition of employment is comparable with last year. Wages have been lowered about 10% and efficiency is greater.

The market for our product is still very unsettled. While stocks are generally in satisfactory condition, merchants are buying very carefully, and so many different prices are being quoted for similar quality goods, that buyers are uncertain as to advisability of purchasing future requirements. There has been a slight improvement in demand.

While trend of prices of materials is improved, prices of finished products are downward, on this basis showing considerable loss on all production. If present prices of cotton materials are maintained for any length of time, prices of finished products must be upward, but as mentioned, we believe that cotton prices will recede, in which case present prices of finished product will not be lower, as cotton prices must drop considerably to permit of a profit at today's selling prices of finished product.

Freight rates are having a serious effect on general merchandising. Transportation is such an important factor in merchandising at this time that it has a very decided, detrimental effect upon the price of any product by the time it reaches the consumer. We must have more favorable freight and express rates, if merchandise is to move across our vast areas and work out to the interest of the masses.

The needs of the day are the elimination of every possible item of expense which tends to increase the cost of operating a business, and efficiency developed to its highest point, so as to secure minimum cost of production, thereby allowing selling prices to be based on lowest cost, and reaching the consumer at prices which will be so attractive that the purchasing power of the people will be enhanced to the greatest extent possible.

The outlook for 1922 is decidedly problematical and uncertain. We do not consider that the worst is over. We believe that we are entering the most extreme and uncertain six to twelve months we have yet had. With prices of grain and cattle in the West lower than the cost of production, with farmers and ranchers not able to pay their bills, thereby placing merchants in the same position with the firms from whom they secure their supplies, and the necessity of wholesalers carrying merchants in the Prairie Provinces for another twelve months or longer, conditions in the West appear anything but hopeful for the near future. Many merchants are doing business at a loss during a period of the year which is the best for operating at a profit, and the losses being taken are placing many in a very undesirable financial position.

In the Eastern Provinces conditions are more hopeful, as construction work is much better than it has been for many months, and employment is being given to many accordingly. Many industries are also operating at greater capacity than formerly, and there appears to be a general bettering of conditions in the East.

The whole situation can be summed up in two words "Caution and Confidence." Elimination of speculation in business; confidence that conditions will right themselves in the near future, and by all working to their utmost to build up our resources and keep down expenses, will go largely to bring about normal conditions.

The Linen Industry

By Wm. Berry

Dominion Linens, Limited, Guelph

RAW materials used by us have advanced approximately 20 to 35% during the past year. Our plants have operated full time; our output has been increased by about 20% and wages have been lowered about 10%.

During the early part of the year, there was a large quantity of distress merchandise both from the U.K. and U.S. which had a very depressing effect on the trade and price, until same had been absorbed. Conditions are now better, and our sales show an increase of over 100% for the past four months as compared with the same period of 1920.

Prices for the finished product of our mill for the first six months were very much lower than prices prevailing during 1920, but, with the firming up of raw material during the summer, sales have been made on a higher level on some of our lines, and we have every reason to believe that deflation is finished and that firmer prices will prevail during 1922.

Our customers have liquidated their stocks of high priced merchandise and have pursued the hand to mouth policy with reference to purchases, which leaves stocks depleted and we expect much freer buying after the first of the year. There is also a much stronger "Made in Canada" sentiment amongst our customers than we have known in the past, and we feel that there will be less imported goods, and more of the Canadian product handled in the future.

Biscuit and Confectionery Industries

Demand Fairly Satisfactory

By T. W. McFarland
D. S. Perrin & Co., Limited, London

SUPPLY of raw materials has been ample and quality satisfactory. Prices are lower in sugar, glucose, flour, shortening, lumber, and in most of the other lines of raw material we use. We believe that a further decline in sugar can be expected, but we do not look for any material decline in flour until the new crop of 1922 and then conditions may require a revision of that opinion. There are, however, many influences that will affect further general declines in the raw materials we use, that, if operative, would tend to uphold present values indefinitely during 1922.

Labor has been plentiful during 1921 and employment was normal. Wages have been reduced as yet. Our aim has been to raise the standard of our industry in the matter of wages and it is our intention to maintain this standard if at all possible. Labor efficiency has been much more satisfactory during 1921.

Demand has been fairly satisfactory, and if labor is well employed in 1922, we look for a fair year's business. Prices have been reduced several times during 1921 and further reductions are now under advisement.

High freight rates have tended to increase the cost to the manufacturer, dealer and consumer, and have accordingly done their share toward keeping up the cost of living. Lower freight rates are desirable and should be put into effect promptly, subject, of course, to the railway companies' cost of the service, as they cannot be expected to conduct the railways at a loss. Railway labor wages and service from labor are due for revisement, just the same as other industries that have been paid abnormal wages, during the period of inflated conditions, for shorter labor hours and inferior service.

The outlook for 1922 is a big question and one on which you may have many differences of opinion; so far as we are concerned, we are going after 1922 business just as hard as we know how, and unless the patient shows a decreasing pulse, in his payments, we shall keep up the treatment.

Normal Conditions by Spring

By F. W. Bean
Bean & Westlake, Limited, Woodstock

THE twelve months ending December 31, 1921, have certainly been a buyer's year. Production has exceeded demand, with the result that there has been keen rivalry for business. The supply of raw materials has been ample, with quality and price on a keen, competitive basis. Prices have been uniformly lower; but 1922 should see still lower levels reached.

There has been a surplus of labour; but wages have not been appreciably reduced. Labour efficiency has been greatly improved.

The market for candy has been fairly well maintained throughout the year. The Christmas demand for fancy packages of chocolates has been curtailed, but the sale of cheaper mixtures has been correspondingly increased. Conditions in the biscuit industry have not been as favorable as in the confectionery branch of the business. It is doubtful if the year's production exceeded sixty per cent. of the capacity.

The prices of biscuits and candy have both been substantially reduced during the year; but a further decline in raw materials and wages will inevitably react in reduced prices of the finished product during 1922.

Price reductions, together with a slowing up of business, have had the effect of substantially reducing the value of the year's sales; on the other hand, freight, cartage, travelling expenses, and many items entering into overhead are higher than last year. The result is that the percentage of overhead to sales has been materially increased.

Since the labour costs enter so largely into transportation, the cost of raw materials, and the cost of production, it is very evident that only a substantial reduction in the cost of labour throughout the country will put industry in a prosperous condition again.

We believe the depression will be more acute during the first quarter of 1922; but with the opening up of spring work, and a flow of immigration to our shores, the summer of 1922 should see normal business conditions again in Canada.

INDUSTRIAL DEVELOPMENTS OF 1921 ILLUSTRATED



North-West Biscuit Company's New Plant

This factory was completed at Edmonton last year and is one of the most modern plants of its kind in Canada. It is of solid concrete and steel construction and fireproof thoughout. Since their organization eight years ago the Northwest Biscuit Company have had a steady growth. Then they employed 26 hands in one small plant. To-day they employ 200, operate the plant illustrated here, a flour mill of 150 barrel capacity and warehouses in eight Western cities.

Working under Capacity

By H. N. Cowan
The Cowan Company, Limited, Toronto

COCOA beans are a very plentiful supply, and prices are now at rock bottom. Sugar has been coming down in price all during the year until now it is about one third the price it was in July 1920. The price today is about 7½ cents per pound, and the normal price is about 4½ cents.

As for labor we can get all the men and girls we require at lower wages than last year. Our labor is more efficient than during the war, but there is still room for improvement.

Our volume of business has kept up very well this year, but we look for a very quiet period during the next six months. Our prices have been coming down from time to time since the first of the year, and we think that they are now about at their lowest.

There is a considerable over production of chocolate and confectionery in Canada. At the present time there is practically no export business to be done. During the war, because of the overseas demand for our products, nearly all the manufacturers increased their plants, and others started in business. Now the demand is not so great, and we are not working to capacity. Our prices are cut too fine, and we are not making fair profits. Chocolate, however, is a necessary food product, and there will always be a demand. This demand is increased, of course, when general business conditions are good and there is lots of money in circulation.

Improvement is Looked for

By F. A. McCormick
McCormick Mfg. Co., Limited, London

WE have found sales more difficult to obtain this year than in the past, but expect to have a fairly satisfactory year in this respect. Raw materials are considerably down to what they were, and are coming down still further. The same applies to the selling price of our goods. Labor has been reduced about 10%. We rather look for conditions in 1922 to be somewhat improved.

(*For additional reports see page 170*)

The Canning and Preserving Industries

Look for Improved Conditions

By W. R. Drynan
Dominion Canners Limited, Hamilton

SUPPLY and quality of raw materials have been good, with prices somewhat lower than the previous year. This refers to produce. As regards supplies such as tinplate, of which we use large quantities, there will be a material reduction in price this year. We also expect a material reduction in the price of boxes, nails, labels and so forth.

Labor has been plentiful and shows a tendency to be more efficient; there has been a slight reduction in wages.

With regard to markets, the first part of 1921 was very quiet. Business picked up about April and continued active right through until December. In volume the movement was about the same as in 1920; in value, there was at least a 25 per cent. depreciation.

Prices of canned goods were cut to rock bottom. The idea was to make prices as low as possible and then gradually work up, if possible, to a profitable basis. Next season the cost of the containers will be lower; also, the fruits and vegetables are likely to be lower if there is to be a large consumption. Canadians cannot compete in foreign countries with the United States or Australia, unless prices are in line with prices in those countries.

Freight rates undoubtedly tend to restrict consumption in long hauls. For example, on shipments to the middle west on staple food articles, the freight is 50 per cent. of the f. o. b. value, which is of course absurd.

We do not look for any great activity in the early part of next year. Unfortunately, owing to the low prices to the farmers, and the poor crops in some districts, this will tend to restrict buying. On the other hand, many articles are now back to pre-war prices and, when the public becomes convinced that prices are at pre-war values, then they will be inclined to step in and resume activities, and this should make business improve all round.

Stocks on the shelves of merchants are low. Everybody is buying from hand to mouth. There are large savings in the bank and the inherent wealth of Canada is tremendous. With the influx of new population, which must come, and with the usual optimism of Canadians, we look for improved conditions in 1922, but no boom.

Selling Goods Below Cost

By Hon. E. D. Smith
E. D. Smith & Son, Limited, Winona

IN the canning industry, the raw material, in so far as tomatoes, peas, corn, and beans are concerned, is contracted for with the grower several months in advance; but fruits, for either jam or canning, are bought when wanted, and prices are paid according to the market prices at the time of purchase. On this account, tomatoes, peas, corn, and beans cost nearly as much as when prices were at the peak, in the season of 1920, because growers were not willing to concede very much at the time these contracts were made, viz., in the winter of 1920-21.

Tin cans, for both canning and jam, for reasons which, no doubt, could be explained, cost us more in the season just past than they did even in 1920, when nearly everything else was at the peak of cost. We had a considerable reduction in the cost of wooden cases, compared to 1920; but, even at that, the cost was nearly double the price prevailing before the war. Labor was reduced last season about twenty per cent., as compared to 1920; but salaries and most overhead expenses came down but little. Such heavy items as interest, insurance, advertising, taxes, etc., were still at the peak.

As a consequence, the cost of producing canned goods was only a trifling amount less than in 1920, except in strawberries and raspberries, two lines chiefly used by the jam factories. These were at such extraordinary high figures in 1920, and were used in such large quantities by the jam manufacturers (the deflation period had not yet set in seriously when these were being picked in June and July, 1920), that most jam factories carried over into 1921 enough of these high-priced fruits either in the shape of jam made up, or as pulp to be made up to serve their needs in 1921. The natural consequence was a tremendous drop in prices of these fruits, as the chief market for them was supplied, and the crop had to be sold on the market as fresh fruit, direct to the consumer, at whatever prices the consumer would pay—the law of supply and demand settled the price.

But, whereas the grower was thus compelled to accept a low price for his crop, as compared to the previous year, the jam manufacturer, owing to stocks on hand from the previous year, which cost him abnormal prices, was, in most cases, precluded from buying the cheaper berries; and, moreover, was obliged to revalue his stocks to a value equal to the market value of these fruits at the low prices of 1921. This he had, however, in the main, foreseen, and did not wait until June and July to revalue his stock, but did so—as nearly as he could foresee values—away back in February and March, 1921.

When the crop of 1921 was sold, a new readjustment of prices took place; but, in most cases, the jam manufacturers had reduced in February and March to what ultimately resulted in the real value. It may be fairly said that jam manufacturers have been selling pure jam, since February, 1921, at the cost of replacement at any time since; and for a part of the period at less than such replacement value. They cannot reduce further until another season, when there will be only such further reduction as will result from lower-priced tin, glass, cases, labor, and overhead, because there will not at all likely be lower costs for the strawberries and raspberries, which are the chief fruits used.

Labor has been considerably more efficient than in 1920, and costs about 20% less. We have not been able to employ so many hands in the jam industry and the canning industry, as the pack has been much below an average.

Markets have been very poor throughout the year, due, no doubt, to the lack of buying power on the part of the public, as well as the still comparatively high prices of both canned goods and jam, due to costs over which we have absolutely no control. We are today, and have been throughout the season, selling nearly everything, not only below cost, but below replacement cost. Corn is a notable example. Canned corn, which is of exceptionally high quality, as there were only small amounts carried over, is being sold at away below the cost of production this year; and every line is sold, both by canners and jam manufacturers, at just about cost of production. There is no line that I know of that affords, or has afforded throughout the year, anything like a legitimate profit.

Prices have reached rock bottom until another season's pack is for sale; and, as previously stated, the price of the pack of 1922 depends upon the price of so many raw materials, over the cost of which we have no control, that it is difficult for me to say whether we have reached the bottom or not. I should say we, at least, have in corn. There is no doubt the whole trend of prices depends largely on the cost of labor; for, if you trace back the cost of any finished article, about seventy-five per cent. of that cost is made up of labor costs.

I see no clear sky yet; and I do not expect any prosperous times or steady work until all costs get down to the ultimate level—which, at the rate of progress in that direction so far, won't be in a hurry.

Some English Competition

By J. Wagstaffe
Wagstaffe Limited, Hamilton

RAW material during 1921 was in fair supply but very low prices were obtained, owing to factories not operating to full capacity. Labor is in good demand, with wages down about 10 per cent. and efficiency fairly good.

The market for our product has been a buyers' one. They have taken advantage of it and are only buying from hand to mouth. Prices have ruled below cost of replacement.

We have been experiencing considerable competition from England. Conditions, which used to provide protection for us, are now turned into a premium in the interest of English exporters such as lower wages, lower exchange, etc.

The outlook for 1922 in my opinion should be better, as wholesalers and retailers are only buying from hand to mouth.

Have Exported Fifty per cent of Pack

By R. J. Graham
Grahams Limited, Belleville

RAW materials have been available for the manufacture of evaporated apples, at about normal prices but the quantity available has been less than normal, and the quantity packed is therefore slightly under the pack in Canada for the previous season. We have organized the manufacturers for selling purposes into a limited liability company called Canadian Evaporated Apples Ltd., of which company the writer is president, and W.H. Millman of Toronto secretary-treasurer. In this way we have been able to stabilize the prices to the wholesale trade to their satisfaction. The price established so far has been on the basis of export values, and we have been able to export about 50% of our pack which has been distributed in the United Kingdom, France, Belgium, Holland and Baltic ports.

Female labour has been paid on the same piece work basis as last year; male labour has had a reduction of an average of about 25%. We have found much greater efficiency this season.

We find marketing extremely difficult on account of the foreign exchange fluctuation. The demand is extremely limited, and just now is practically dead. The future price will depend entirely on the demand and from what we can see is likely to go lower than it is at present.

Freight rates are a serious item in our business, especially on the cheaper lines of raw material, which we have been unable to purchase for that reason, and a considerable quantity of these apples have been wasted, which we could have used had freights been about 20% less.

The outlook, so far as my judgment goes, is for a still further deflation in price, and I am inclined to think the coming year will be one that requires great caution, and careful management on the part of all manufacturers. We cannot hope for any real improvement in trade in our goods at least for another year, and in my judgment not until labor and exchange are stabilized.

The Salmon Canning Industry

By F. E. Burke
Wallace Fisheries, Limited, Vancouver

THE run of salmon for the season of 1921 has been very, very poor; one of the smallest in the history of the business. While prices on all grades paid to the fishermen were less than the preceding year, on the higher grades the run was so small that prices were very firm. On the better grades, prices were about 20% less, and on the more plentiful grades about 80% less than the preceding year—a great many of the producers not wanting these latter fish at any price, because of there being a large stock of unsold manufactured product on hand at the beginning of the season. We think that the bottom has been reached on the raw fish prices, and that there will be very little, if any, reduction, even on the highest price scarce species.

The wage of the fisherman is, of course, the price he receives for his fish; and these people constitute the biggest proportion of the labor employed around the plants. We should say that, taking them collectively, wages paid for the season of 1921 were 20% less than the preceding year on other classes of labor. There is no question at all but what the efficiency of all labor around the plants increased a great deal during the year 1921.

Both the domestic and the export market (the latter being the great source of this industry's distribution), were in a deplorably demoralized condition at the beginning of the year. Tight finances in foreign countries, coupled with the after effects of the large war stocks, virtually killed this market. Domestically, the buyers were only buying from hand to mouth, as they actually required the product; and these requirements were always placed in small quantities. With the small production and steady demand, conditions have improved very materially during the year; and, although there were exceedingly heavy stocks at the commencement of the year, the steady demand has used them all up, and they are very low at the present time; and before the new season's production comes in, it looks as if there would be no stocks left in canners' hands.

The trend of prices at the first of the year was exceedingly weak, some of the prices being below pre-war prices, and not more than 30% of the cost of production. These prices naturally stopped the production, and as the demand for the product did not cease, prices gradually increased towards the latter part of the year to the point where it would seems as if, with the reduced price of supplies necessary for manufacturing, replacements of stocks next year could be made so as to allow the selling at the present prices with a profit to the manufacturer.

The reduction of the ocean freight rate has benefitted the producers a great deal; and the opening of the Panama Canal, with the consequent bringing in of direct communication with British Columbia and the different foreign countries, has helped the fish-canning business a great deal, as it has brought the manufacturer into closer contact with his foreign distributors, and given him a chance to know just exactly what each market desires. While considerable attention is being paid to our domestic market, to increase its consuming power, the producers work under a considerable handicap because of the freight rates from this place to the prairies and Eastern Canada. These markets are susceptible to a great deal of development; but this development will not take place until our freight rates are put on a par with those of the people to the south of us, who distribute a corresponding product domestically in their own country, at a much less cost.

The short pack of 1921, with the steady demand, has had the effect of almost entirely cleaning up the market. A great many parcels of product that were put up by companies that sprang up during the war, who knew very little of the business, were not up to standard, and hung over the market with a very depressing effect as to price. The short stocks have caused these goods to go into consumption, and as the war has increased the demand in quite a few countries for our canned fish, now that the market is entirely cleaned up, it should allow the industry to get started on a legitimate basis in 1922. Prices of supplies and materials are down; present stocks have been liquidated and all loss absorbed, so that the companies, which have weathered the storm, are in a position to start 1922 with a much brighter outlook.

We do not look for any boom-like demand; but we do think the market is going to take a steady legitimate supply from the standard producers from now on, and that we are entering an era of legitimate increasing demand. This era is going to be one of extremely keen competition, we believe; but, at the same time, the man who absolutely understands his business and knows his costs, is going to be able to market his goods at a price that will give him a proper profit.

INDUSTRIAL DEVELOPMENTS OF 1921 ILLUSTRATED



First Unit of New Hamilton Industry

Soy Products, Limited, were organized in 1921 to manufacture a synthetic milk from the Soy bean. The photograph shows their plant nearing completion. The two-storey building in the foreground is the main process building. Behind it is the three-storey dryer building, and the boiler-room is in the background. The plant has a total length of 145 feet and a width of 40 feet. Manufacturing will commence about middle of this month. Daily capacity is 3 tons.

Market for Fish Satisfactory

By J. K. Loggie
W. S. Loggie Co., Limited, Chatham, N. B.

WE have had no difficulty in securing supplies and quality has been satisfactory. In the first part of the year, prices were quite high, but later on in the season there was considerable reduction in prices. We would state that in our opinion, prices on all commodities used by us are at least 33⅓% lower this year than last year. We do not believe that the bottom has yet been reached.

There has been much unemployment this year and much more unemployment than last year. Wages have come down, we would say, to the extent of 33⅓%. Labor has been efficient.

Our chief products are lumber and fish. The lumber business since the first of the year has been steadily getting worse. We cannot see any improvement. With lower prices, we believe there will be an increased demand. In fish production the market has been satisfactory, and the outlook is satisfactory.

The trend of prices of finished products during the year has been for lower values. We do not believe that rock bottom has yet been reached or the process of deflation has been completed.

Our opinion is that the outlook for 1922 is not good. We do not want to be pessimistic, but we believe that the worst is yet to come. We are of the opinion that a good many business firms will have to go to the wall before business conditions have righted themselves. Lower labor costs will permit cheaper manufacture which will be considerable help to manufacturers.

Conditions in the Lumbering Industry

Worst of the Storm Over

By Geo. W. Grier

G. A. Grier & Sons Ltd., Montreal

I AM not very conversant with manufacturing conditions west of the Georgian Bay district, and, as far as markets are concerned, I can only speak with any certainty of Quebec, Ontario and the Eastern States. Lumbermen of all degrees, viz, manufacturers, wholesalers and distributers, and retailers, have, for the most part, during the past twelve months, been wandering in a barren wilderness devoid of orders or profits and abounding in losses of varying degrees of severity. There were a few fortunate firms whose inventories were light, but only very few of the trade found themselves in this fortunate position. The result has been that many of us, who in the past fancied ourselves possessors of business foresight and ability to judge future market conditions, are now disillusioned and in some doubt as to our abilities in this respect and are groping about in a more or less bewildered state of mind, trying to discover from others what the future portends in our own particular line of trade.

Some of the trade think, or would like to think, that the worst is past as regards re-adjustment of lumber values and lack of demand, and, indeed, during the past few weeks, the demand has undeniably improved, although in many cases prices still seem to continue to sag.

Prices to-day of spruce and white pine are from 30% to 100% below the peak of 1920, and in hardwoods, such as birch and maple the reduction is even greater. Certain lines and grades in both hardwood and soft wood are indeed not very far above pre-war levels. Personally, I would not venture an opinion as to whether the bottom has as yet been reached.

With reference to cost of production, wages for bushmen are to-day from $25. to $30. per month, as against $75. to $100. per month during the past few years, so that it is evident that labour costs are much reduced as far as logging is concerned. Wages of sawmill hands have not been readjusted to anything like the extent of bush wages. Labour all round is noticeably more efficient and willing.

As far as markets are concerned, the United Kingdom has not been a heavy buyer of Canadian lumber during the past shipping season. The markets in New York State, New York City and the New England States have been very heavily supplied with southern pine and lumber from the Western States. The manufacturers of lumber in the U. S. have slaughtered their prices to such an extent that Canadian lumbermen have not felt inclined to meet the competition.

The tremendous advances in freight rates have no doubt done their share in disorganizing trade conditions and the railways should be compelled, at the earliest possible moment, to lower their rates to the greatest possible extent.

As to the outlook for 1922, I must as I said above, decline to make predictions. If deflation is not as yet complete, it must be very nearly so, and as most lumbering companies close their books for the year at the end of December, they will, this season, at least be able to take stock with some sort of certainty that values they place on their inventories are really market values and they will therefore also learn with some certainty as to how they stand. A year ago we faced a financial crisis which it was evident would be severe beyond previous experience, and possibly so severe as to bring to many financial shipwreck. We all feel now that the worst of the financial storm is over and those who have been able to weather the storm safely are looking forward to the future with a good deal more peace of mind than was the case twelve months ago. There appears to be, generally, a feeling of confidence in all branches of the trade that the year 1922 will witness an improvement in the demand for lumber, the consensus of opinion being that this improvement will be gradual and will not take the form of any pronounced boom. It is generally admitted that stocks of lumber in the hands of retailers and consumers are small and that a normal demand would compel replenishing of supplies with possibly higher prices resulting.

Favorable Spring Business

By W. F. Beck

The C. Beck M'f'g. Co., Limited, Penetanguishene

THE lumber business in Ontario has gone through a period of deflation, unparalleled by any other manufacturing business. The quantity of unmanufactured logs, by spring, will be the smallest in the history of the industry. This will include the winter's cut now being taken out. An industry of this nature takes a long time to get back to normal production on account of the distance the lumbermen have now to go back for their raw material, some logs taking from one and a half to two years to reach the mills.

The large amount of unskilled labour available has caused a tremendous drop in wages and efficiency has increased. Selling conditions have been very slow for the first ten months, but in the later end of the year considerable business has sprung up, principally from the United States and conditions point to a very favorable spring business.

Prices have receded below cost of production and there has been a slight up-turn from the extreme low, which will be carried somewhat further when the small amount of stock taken out becomes generally known. There is also a large housebuilding programme fairly well under way, which is very badly needed in all centres. The outlook for 1922 is therefore exceedingly bright.

Have Reached Turning Point

By W. B. Snowball

J. B. Snowball Company, Limited, Chatham, N. B.

A GREAT reduction was made in the output of logs during the logging season of 1920-21. In this section there was not more than 40% of an ordinary year's cut. These logs, however, were not produced at any material reduction in cost over previous years, as men's wages were still as high and the supplies entering into woods work, such as provisions, etc., had not fallen in price. The larger portion of the raw material got out during the past session is still on hand, as very few mills operated this past year, and those that did started late in the season and used up logs that they had on hand from previous year's operations, so that the raw material now on hand is at about the highest cost of the war period. There is sufficient on hand to operate mills for about three-quarters of the season. Some small operations are being carried on during this winter but only enough to keep together organization. It will not be half as large as last year. This stock will cost a great deal less to produce as far as labor and supplies are concerned but the Government stumpage, which is a large factor, has only been reduced by $1.00 per M or from $5.00 to $4.00 per M, so that the actual decrease in cost will not exceed 25%.

There was an over abundance of labor available during this past year and con-

INDUSTRIAL DEVELOPMENTS OF 1921 ILLUSTRATED



Fireproof Sawmill at Braeside, Ontario

This mill, the last word in modern construction, was built by Gillies Brothers, Limited, to replace their former plant, which was burned in 1919. The mill is on a solid rock foundation, and is built entirely of steel, concrete and brick. The dimensions of the mill proper are 75x190 feet. The power house is a separate building 50x80 feet. Forty-eight motors drive the machinery.

sequently a large amount of unemployment. Wages were reduced in the industries that were operated, 25% to 30%, but employees were more efficient and remained more steadily at work and showed an anxiety to retain their positions. Men can be engaged for the woods this present season at $25.00 per month as against $75.00 last year.

All markets using lumber products seemed to have been over stocked so that there was really no demand and what stock was in the hands of millmen, who were compelled to place it on the market irrespective of price, realized very low prices. This condition existed until about the month of August when there was apparently more demand but still no great increase in price. The outlook is a little more encouraging at the moment and with the stabilizing of all industries and business conditions, it looks as if a marked improvement in the market demand will take place sometime early in 1922.

The prices that were taken for lumber in the rough and manufactured during the past season were no criterion of value but an evidence of either a lack of faith on the part of the holders in the future or the fact that they were compelled to realize. The bottom was reached in prices about August and a slight improvement took place about September. There is still evidence of an upward tendency; not very marked, but still sufficient to warrant that eventually they will reach replacement values plus a reasonable profit. Absolute requirement during the past year has sufficiently depleted the manufactured stocks, and this together with the small production of the present winter, will make the holdings in this line only about sufficient for ordinary requirements, and therefore, we feel that the process of deflation has been completed.

The railway and water freight rates have had a most adverse influence on industry, especially that of lumber and an insistent demand should be made from all directions that transportation charges should be reduced to the same extent as the value of all other products and that the time has now come when freight rates should at least get back to those in existence in 1916. If this were brought about at once, it would give a great impetus to general business and would do more than anything else that we know of to improve conditions and revive trade and the railways' revenue would increase. Of course in the accomplishing of this, it must be admitted that the wages and working conditions of the railway men must come down to conform with those paid to men employed in industries.

We feel that we have now reached the turning point and from now on we will have an improvement in trade not only in the lumber business but in the whole industrial life of the country. We are not going back to the extraordinary conditions of 1918-19, which made for disaster, but we will get to those normal conditions that existed before the war. Canada has stood the shock of the war and reconstruction better than any of the other countries that participated in the Great War, and we are satisfied that if Capital and Labor can go steady for another year, not trying to over-reach, but moving with caution, we will enter upon 1923 with all industries stabilized and our country prosperous.

Steady Demand Anticipated

By W. G. Clarke

Clarke Bros., Limited, Bear River, N. S.

RAW materials have been readily available during the present year, very little delay having taken place in our securing what we required, but the quality is not up to standard in a very large proportion of the goods received, and prices, while materially less than a year ago, are still too high. We do not think the bottom has yet been reached, and that further deflation must ensue.

In the early part of the year the supply of labor was scarcely adequate, but since the middle of the summer, there has been a surplus of labor supply, at wages from 25 to 10% less than those in effect at the beginning of the year, and with at least 25% greater efficiency. The present situation is that labor is readily available for all purposes for which it is required, ordinary labor having been fully deflated.

Markets for our products, lumber and manufactures thereof, and pulp, have not been too good.

The demand has been less than formerly, although during the past three months there has been a material increase in this regard, in which during the last two months, pulp also has been included.

Our opinion is that the prices for such products as we manufacture, have been fully deflated; that we have reached rock bottom and that any change from these values will be to slightly higher levels.

Present rates of freight are such as to render the use of the railways in the moving of our product practically impossible. We are fortunately situated upon tidewater, and with the lowering of freight rates by water, we are able to place our products in the markets where they are used at a price greatly less than the railways require. In fact railway shipments, if we had to depend upon these alone, would practically strangle the business. Until some strong hand takes charge of this situation, the business of the country must continue to suffer, and a return to normal conditions be very greatly retarded.

We anticipate a steady demand for the products we produce during the year 1922. We believe the worst in these commodities is over. While there will not probably be a very marked increase in prices, with the deflation of labor and with the reduced cost which must come in the materials used in the manufacturing of our products, we believe we shall reach in the next three months, a solid basis upon which we can again commence to build for the future. As labor was the first to take advantage of the acute situation caused by its scarcity, and as this in our own particular instance has been sufficiently deflated, we see no reason for pessimism or fear as to the future. We have to get away from the prices prevailing in 1917, 18 and 19, and get back to the conditions prevailing in 1914 so far as manufacturing costs are concerned. Our view is that any industry which is able to do this may make moderate preparations for renewed trade during the year 1922.

Industry Lacks Sufficient Market

Royal Bank Bulletin

THE pulp and paper industries have not experienced the prosperity of 1920. Pulp exports especially were affected. Comparing the two six-month periods, ending September 1920 and 1921 respectively, we find in the value of mechanical pulp exported a decline of over 50 per cent; in kraft pulp, a decline of 50 per cent; in bleached sulphite, a decline of some 60 per cent, and in unbleached sulphite, one of almost 80 per cent. Newsprint paper made a much better showing.

The situation is this: Our pulp and paper manufacturing industry has enlarged its productive capacity greatly during the last two years, but is not able at the moment to find a market for its full output. This state of affairs eventually will be remedied by an increase in the world's consumption of paper. In the meantime, profits will be curtailed, although production costs are declining. There are some companies which expanded unduly, and were not able to face the reversals in business mentioned above.

INDUSTRIAL DEVELOPMENTS OF 1921 ILLUSTRATED





New Plant at Mount Dennis, Ontario

Above are shown an exterior and an interior view of the building erected during 1921 for the Toronto Asphalt Roofing Manufacturing Company, Limited. The plant has a capacity of 20 tons for each eight hour shift and composition roofing, slates and roll roofing are manufactured. The machine room is 175 x 50 ft, red brick walls and mill construction. Boiler room is 50 ft. square, red brick walls, steel and concrete roof, 22 ft. high, and contains 100 h.p. boiler.

The Furniture Manufacturing Industry

General Review of Conditions

By Wm. Cawkell

Secy., Furniture Manufacturers' Association, Toronto, Ontario

RAW materials entering into the manufacture of furniture have, generally speaking, been easier to procure. Lumber, tapestry and glass are about 30 per cent. lower than a year ago, but glass and the better grades in lumber are stiffening in price. Both have advanced from their lowest point and the likely trend is upwards,—gum, oak and walnut lumber decidedly so. Apparently the bottom has been reached for the time being in most furniture materials. The cost of commodities used in the Industry are at this date 75% higher than 1914.

Labor wages are still 90% above 1914 rate, and 15% lower than December, 1920. Labor in the factories is more efficient.

The furniture manufacturers have had to depend almost entirely on the home market to take care of their output. During the spring and summer months, factories were not running beyond 50% of capacity, but during October and November, a decided improvement took place, and the output is now on an average probably 65% of capacity. Furniture manufacturers have put forth greater selling efforts with good results.

Household furniture prices are about 30% below the 1920 prices, and while the prices for January, 1922, will show some slight adjustments both ways, according to their grade, there will be an upward trend in many lines, reflecting the higher costs of certain materials which enter into their manufacture.

In view of the undoubted fact that the main raw materials have increased recently from 10 to 25 per cent. it is obvious that there must be a rebound from the extremely low prices of the past six months.

High freight rates are undoubtedly having a deterring effect on the free movement in to and out of the industry, as there are of necessity long hauls both of lumber and manufactured furniture. A substantial reduction in railway wages, with a corresponding reduction in freight rates, is perhaps the greatest need of industry at the present time. Given lower freight rates, the outlook for 1922 would be very promising.

During 1921, contracts were awarded for some 15,000 residences. There is still a very large shortage of houses throughout the Dominion, and it is reasonable to expect that during 1922, because of the reduction of building costs, an estimate of 25,000 homes to be built in 1922, is not too high. The expected amount of new furniture required for these homes, with the regular replacements, warrant us in looking forward confidently to a gradual increase in demand, which, towards the fall will give us normal operations in the factories.

Look for a Good Year

By H. O. Bell

The Bell Furniture Co., Limited, Southampton

WE have found the raw material market considerably easier as to supply and with a considerable improvement in quality. While prices are somewhat lower, especially on the lower grades, we are inclined to think that prices will stiffen somewhat as the surplus stocks are reduced. We do not look for a further decline of a general nature.

Labor conditions have shown considerable improvement inasmuch as there is a bigger production per unit and, while mechanics of the class are still receiving approximately as much as a year ago in the way of wages, unskilled and semi-skilled labor has been reduced from 12 to 15%. Production has kept pace and in most cases increased under the conditions existing in the factories to-day and it is quite possible to expect still a larger production.

In the matter of markets, the spring of 1921 saw most factories carrying heavy stocks of raw material. This, combined with the tendency of the public to refrain from buying, resulted in a rather drastic reduction in price. This has been in progress during the year and has resulted in the factories clearing out old stocks and securing new supplies on which they are basing their new lines on present day costs. While the effect of deflation has been so severe that it has caused a reduction of prices not commensurate with costs of production, we are inclined to think that there will be a slight increase in price on the finished goods in the near future.

We are inclined to be very optimistic as to the outlook for 1922. Freight rates and other influences have produced a strenuous year, but most factories have taken the loss on goods on hand with the object of keeping their organization intact and their plant running, with the result that already there is a noticeable improvement in trade conditions. With the promise of increased building to act as a stimulus, combined with the improvement already noticed, we feel confident that the furniture business will share in the general prosperity.

Preparing for Busy Spring

By Beach Furniture Co., Limited

WE find the quality of raw materials somewhat better than in the past, but prices are higher than they were two or three months ago. Labor is more settled than a year ago. Wages are slightly lower.

There appears to be a little better market for furniture than a year ago, owing to the fact that people have commenced to realize that prices on goods are more stabilized.

We are looking forward, and feel confident that the year 1922 will be a good year for the manufacturing concerns, and we are preparing for a busy spring.

Furniture Prices at Bottom

By Ontario Manufacturer

LUMBER was lower in July than a year ago but has since advanced from 10 to 20 per cent. and we feel that the bottom has been reached. Mirrors also were lower but have since advanced about 25 per cent. Wages are down 10 per cent. and efficiency shows a slight increase.

There has been a slight improvement in demand for furniture during the fall but we are not optimistic for the first half of 1922. Prices have reached bottom for several years to come.

The building of new homes should mean a a great deal but we are not hopeful for the first half of 1922. Improvement should set in during the last half of the year.

Rock-bottom Prices Reached

By Ontario Manufacturer

IN the early part of the year, supplies and prices were easier but the last two months have shown a tendency towards a stiffening in price, especially in southern lumber and shellac.

Labor supply has been easy, and a reduction of 15% to 20%, insofar as we have been concerned, has been accepted without comment. Production, under reduced labor employed, has shown an appreciable improvement.

There has not been much improvement in the market for furniture, except for a slight flurry in August and September. Indications however, point to an improvement in the early part of the year, owing to dealers generally being short of stock.

The general concensus of opinion is that rock-bottom prices in the furniture industry have been reached, and there is a tendency towards a slight stiffening on new goods being produced.

A reduction in freight rates will naturally be beneficial, inasmuch as it effects the laid down cost of goods.

We are hopeful of considerable improvement in business as dealers have refrained from buying, except "hand to mouth" needs. With improved conditions and stimulus in building, a natural demand for furniture is caused and should prove benficial to the furniture industry as a whole.

Improvement in Last Three Months

By A. E. Ruby

The H. Krug Furniture Co., Limited, Kitchener

THERE appears to be no difficulty in obtaining supplies of raw material, quality is good and some prices are still high. We do not think that bottom has been reached.

We have not laid off any help during the past year. There has been a small reduction in wages of 10%. Both time and piece workers are more efficient and accomplished more work than during 1920. This is attributed to the fact that labor is more plentiful.

Conditions in the furniture market were noticeably quiet during the summer months, but during the last three months there was considerable improvement noted, about 60% of normal.

Prices are 30% down from peak prices and while we do not see any further reductions in the near future, we do not consider that the process of deflation has been completed.

Supplementary Reports in February

Owing to the exigencies of time and space, it has been found impossible to include in this issue of INDUSTRIAL CANADA, *all the reports on business conditions in 1921 received up to the time of going to press. These will therefore be held over until the February issue aud published as a supplement to the material appearing in this number. Among them are some important comments on the situation and outlook, which should not be passed over.*

State of Paint and Varnish Industry

Market Has Been Fairly Good

By W. S. Fallis

The Sherwin-Williams Co. of Canada, Limited, Montreal

AMONG the factors to be dealt with in considering the outlook in the paint and varnish industry for the coming year, the question of raw materials is an important one. Speaking generally, the prices of raw materials used in the manufacture of paint and varnishes and allied products have, in common with many other raw materials, declined very considerably from the high levels of a year and two years ago. This condition is reflected in the prices of the finished products, which have been reduced over 30% during the year, thus passing on, direct to the consumer, the benefit of the lower cost of raw materials. As to whether we are at present seeing the lowest point in raw material prices it is difficult to say, but the general opinion seems to be that in most cases further extensive declines cannot be looked for.

Labor conditions do not show much change from last year. Wage reductions in our industry have been very slight, and taken altogether, the labor problem is to us not a very difficult one. We find that the average employee is equally as efficient as previously; in fact there is perhaps an improvement, such as usually becomes apparent when there is more or less unemployment in the country.

Considering market conditions generally during the past year, the market for paint and varnish products has been fairly good. Some falling off in demand was experienced in industrial sales, but sales to consumers through agents and retail stores, were well maintained. Present indications point to a further improvement in the general demand, both industrial and consumer, in the near future.

As pointed out in a previous paragraph, the price of finished paint and varnish products has been materially reduced during the lastt welve months, to the extent of over one-third. This reduction was due to a desire in the industry to stimulate consumption by passing on to the consumer immediately, the benefit of lower raw material markets, although in doing so a very considerable loss was occasioned to the manufacturer in adjusting his raw and manufactured stocks to the new prices, in that prices were issed at replacement value when the manufacturer had considerable stocks of finished goods at a higher cost, upon which he had to take a loss. These adjustments have now, however, all been made, and as the raw material market is more stable at the present time, it is not likely that the process of deflation will extend further. No extensive fluctuations are looked for in either raw material or finished product prices in the near future.

Consistent with falling prices, reduced operating costs might be expected, but while this factor has materialized to some extent, the reduction is operating costs has not kept pace with the reduction in prices. Labor costs, freight rates, taxes, and all the other expense items which industry has to bear, still continue high, and until some readjustment is possible on these items, the consumer cannot expect to have the full benefit of low prices.

As far as the future is concerned and can be foreseen, conditions are encouraging. Trying times have been experienced by many industries, although the paint and varnish business has been more stable perhaps than others. Our educative advertising campaign is bearing fruit, and people are using more of our products every year to conserve, improve, and beautify their property. A stimulation in building during the next five years is inevitable, and we are proceeding with plans for a steady increase of business in our own company and believe that the same is true of the industry as a whole.

Steady Improvement Anticipated

By Arthur D. Brown

A. Ramsay & Son Company, Montreal

OUR experience in connection with obtaining raw materials has been much more satisfactory than in the past few years. As regards quality, we are now able to secure as good quality as we did previous to the war, but prices are still firm on most of the materials we use, although they are considerably lower than they were during the war period.

We did not find very much change in labor conditions. Wages are somewhat lower, but we must admit that the efficiency is considerably better than it was during the past five years; in fact, we feel that it is gradually getting back to normal.

Markets throughout the past year have declined considerably as regards the selling price, but we are pleased to report that at the present time there is a decided improvement in the demand for our products. We made several drastic price reductions, but feel that the prices prevailing at the present time will remain firm for some time to come.

Regarding the outlook for 1922, we cannot help but feel optimistic, owing to the fact that our tonnage of shipments for 1921 was equal to the largest year in the history of our business, and we hope to live up to the paint slogan of "make 1922 the greatest paint and varnish year." We are inclined to think that the worst is over and that from now on there will be a steady improvement.

The Situation Analyzed

By H. S. Boutell

Dominion Paint Works, Limited, Walkerville

THROUGHOUT the year 1921 it has been possible to secure most of the principal raw materials used in the manufacture of paints and varnishes, promptly and at reasonable prices. Lead carbonate, which is probably the principal pigment used in the paint industry, has dropped in price from $16.27 per hundred pounds in 1920 to $9.85 per hundred pounds in 1921. Red lead has declined correspondingly: so, also, have other pigments and dry colors used in tinting. The reduction in the price of rosin has been even greater. In the case of linseed oil—the principal liquid used in paint—the price has declined from $1.40 to 81c.½ We believe that prices now are about as low as justified by costs of manufacturing. In some cases, we secured material at prices which we know are below the cost of reproduction. This is due to the keen competition which exists today, and the desire of every one to keep their plants busy, even at a sacrifice. This condition may produce some further reductions in various items; but higher prices on many materials are sure to come as soon as business improves.

It has been possible to get all kinds of help without difficulty for the first time since before the war. Prices of first-class clerical labor have not been reduced. Prices of cheaper help, and on factory labor, are down 10c. to 20c. per hour. All labor, including the very highest type of help, has increased at least 60% in efficiency.

The market for paint and varnish has not been good, except in spots, during the year. Construction of new projects has not gone ahead to any great extent, and expenditures for improvement and maintenance of plants, as far as painting is concerned, have been held to a minimum. In spite of this, business in 1921 was far better than in any year except 1920. We believe that business is much healthier and feel sure that we can see signs of improvement which will make 1922 a considerably better year for us than was 1921.

Prices on all our products have been reduced during the year and probably a further reduction in prices will go into effect before the end of this month. This will take into account all reductions in raw materials since the last reduction was made. If there are any further reductions in raw materials, they will be passed on to our customers in lower prices during the coming year. Prices now are as low as justified by cost of raw materials and cost of manufacturing. If, as above indicated, costs increase, the price of some paints and varnishes may be advanced.

Freight rates constitute costs which are passed on to the customer. Part of the present high prices are the result of the high freight rates. A reduction in rates at the present time, will permit lower costs and lower selling prices. While, a few months ago, a cut in freight rates would, doubtless, have reduced the income of the railroad with perhaps no effect on business generally, today we believe that a reduction in freight rates would mean an increase in business to a point where there would be no reduction in railroad earnings; and a reduction in selling prices would be possible because of the saving in the freight cost.

We are convinced that the worst is over and that improvement has already set in. Spring will show a very satisfactory revival. In spite of the fact that there are still a few industries in Canada that will have to suffer some further deflation, prices in most lines are down to a reasonable basis, and, in many cases, below cost of reproduction. In such cases, there is the probability of higher prices. There are no stocks of material being carried anywhere. Not much retail buying in any line is needed to lead to the placing of orders for stocks that will mean activity for the manufacturers. Conditions are fundamentally sound; money is easy; and the buying power exists. This depression at the present day is psychological, and our people are naturally optimistic.

(For additional reports on Paint and Varnish Industry see Page 170)

The Rubber Manufacturing Industry

General Conditions to be Better

By A. R. Kaufman

The Kaufman Rubber Co., Limited, Kitchener

THE price of our raw materials on the whole averages the same now as a year ago. Previous to that date, however, there was a sharp decline. We do not think the arices of our raw materials will decline further to any great extent, and raw rubber will advance.

Conditions of employment now are a little better than a year ago. We have reduced wages 20%. The efficiency of day labor has increased about 20%, thus reducing day labor costs about one-third, and piece work labor 20%.

The market for our material has declined about 25% during the past year. There is a decided improvement in demand at present, due to present depleted stocks and overcautious buying during the past year. The weather conditions this fall are a great deal more favorable for rubber footwear consumption than last year.

Our own finished products will decline still further, and we believe that the average market prices for all finished products will also decline. We think some lines have reached the bottom while others will decline.

We think present conditions warrant lower prices on the whole, but human nature is not as prompt in lowering prices as advancing them. We do not think the consuming public or the industries will loosen their purse strings until they are more convinced that prices are nearer the level that present conditions warrant. Expansion will naturally not take place to any extent until investors feel that their investments will not depredate 25% in one year. If the average human being were as willing to adjust prices on a declining market as rapidly as on an advancing market, the periods of depression would be shortened considerably.

We think general conditions for 1922 will be better than 1921. We believe that the average stocks throughout the country are reduced considerably, and more buying will be necessary to meet unavoidable consumption.

Large Decreases in Prices

Views of a large Ontario Tire Manufacturer

RUBBER is still available for immediate shipment at prices below the cost of growing and shipping to Canadian ports. So, distressed prices still prevail, but although they are distressed, they are more than 100% higher than the lowest distressed price during the past year. The price situation on rubber is very similar to that on wheat. There is a substantial available supply and it is probable that it will take another four to six months before rubber prices will reach a point that represents profit to the grower.

There is just a normal supply of cotton. There will need to be decidedly improved conditions in cotton growing in 1922 or else there will be a shortage of cotton that may send prices close to the previous peak prices.

The market for rubber goods for 1922 promises to be somewhat larger than for 1921, rated on material basis, but prices will be materially lower than the average for 1921. The prices for finished rubber goods have likely reached the bottom. During the past year there have been decreases in the prices of many articles of from 30% to 40%.

The industry needs every possible assistance in the way of favorable freight rates, reasonable labor prices and other items of overhead in order to maintain for any long period the low price levels which have been established.

It is doubtful whether any other manufacturing industry could be found which has liquidated to the extent that the rubber industry has. In so doing, however, it is now on a basis which should avoid further difficulties for those that are well established and should enjoy a gradually increased output."

Expect Capacity Production

By J. O'Mara

K. & S. Tire & Rubber Goods, Ltd., Toronto

THE market for the raw materials which go into tires and rubber goods has reached bottom and is advancing. Cotton of both American and Egyptian growth is reported to be a short crop and it is predicted that by the end of the season, before the new crop comes in, there will be very little left to carry over, so that an actual shortage may be looked for during this coming year. Rubber which was selling some few weeks ago in New York at 15 cents a lb., is now quoted at 20 cents. The supply is ample but producers claim that it is selling below cost of production.

Labor in the rubber industry is more efficient than it has been in the past, and, while recently manufacturers were satisfied if they produced one tire per man employed, they are now aiming at producing three tires per man, and have every reason to believe that they will be successful. Wages for day labor has been reduced about 20%, but most experienced rubber workers are paid on piece work, which has not been reduced to any great extent.

At the beginning of the present year, heavy stocks of tires and tubes were in the hands of the manufacturers, while distributors refused to purchase except for their immediate requirements and the consumer would not spend any money on equipment until it was absolutely necessary for him to do so. These stocks have been gradually marketed and the tire business is getting back to normal. Stocks of tires and those manufactured since the beginning of the year were disposed of principally in Canada, as export demand was not a factor.

Prices of rubber goods to the ultimate consumer have been reduced on various occasions throughout the year until now they are being offered at lower than pre-war prices. It is doubtful if they can still be further reduced without showing an actual loss to the manufacturer. Had not the raw materials going into the rubber goods been reduced and the efficiency of the labor increased tremendously, the manufacturer would be working at a loss at present selling prices. With the prices of raw materials advancing, manufacturers cannot continue to sell at present quotations without losing money.

If the public would only realize that "rock-bottom" prices have been reached, conditions would immediately improve. Statements of rubber manufacturers indicate that the price reductions made recently have renewed the confidence of the purchasing public and dealers throughout the Country and manufacturers are already beginning to build up stocks of tires which have been practically exhausted as the result of the selling season recently closed. Motor cars are not a luxury; they are a necessity in the every day life of the Canadian public and, while motor cars are used, there will be an ever increasing demand for tire equipment. There is no doubt whatever that the trade depression is on the mend and that the confidence of the buying public is growing. We look forward to 1922 to supply us with sufficient business to keep our present plant working to capacity, twenty-four hours a day. We have orders on our books and arrangements are now being completed which will ensure us having this business.

INDUSTRIAL DEVELOPMENTS OF 1921 ILLUSTRATED



Tire Plant Enlarged During Year

The Oak Tire and Rubber Company, Limited, Oakville, Ontario, found that increasing business required larger premises and during the past year they have added a storey to their original plant, thus doubling their capacity and output. This cut is from architect's drawing of enlarged plant.

Review of the Dairy Industry in 1921

The Dairying Industry of Canada During 1921

By J. F. SINGLETON

Chief, Markets Division, Dairy Branch, Ottawa

THE latest statistics available relative to the dairying industry of Canada are for the year 1920, recently issued by the Dominion Bureau of Statistics of the Department of Trade and Commerce.

Table No. 1 shows, by provinces, the number of creameries, cheese factories, combined cheese and butter factories, condensed milk factories, total number of factories, patrons of all factories and number of cows from which milk was supplied to all factories during the years 1919 and 1920.

TABLE No. 1

Province	Creameries		Cheese Factories		Combined Factories		Condensed Milk Factories	
	1919	1920	1919	1920	1919	1920	1919	1920
P. E. I.	10	12	20	20	7	4	1	1
N. S.	22	22	1	2	.....	.....	2	2
N. B.	17	15	24	22	.....	1	.....	.....
Que.	631	634	833	813	403	361	1	1
Ont.	179	188	888	816	37	33	17	21
Man.	44	53	12	4	.....	.....	.....	.....
Sask.	42	46	1	1	.....	.....	.....	.....
Alta.	48	48	5	2	5	5	.....	.....
B. C.	25	27	3	3	1	1	3	3
Total	1,018	1,045	1,787	1,683	453	405	24	28

TABLE No. 1—Concluded

Province	Total Factories		Patrons		All Factories	Cows
	1919	1920	1919	1920	1919	1920
P. E. I.	38	37	4,129	4,584	17,117	17,988
N. S.	25	26	5,263	5,513	23,180	24,479
N. B.	41	38	2,191	2,596	15,180	14,715
Que.	1,868	1,809	79,015	78,306	564,654	581,578
Ont.	1,121	1,058	99,771	105,353	747,247	797,007
Man.	56	57	29,677	24,617	84,112	77,445
Sask.	43	47	26,319	26,817	67,335	58,522
Alta.	58	55	25,453	24,768	96,923	105,189
B. C.	32	34	3,242	4,139	32,694	42,076
Total	3,282	3,161	275,060	276,693	1,648,442	1,718,999

Table No. 2 shows the total of different dairy products manufactured during 1920 with values. "Dairy Butter" and "Milk used as milk" are estimated.

TABLE No. 2

Products	Quantity	Value
Cheese	149,201,856 lb.	39,100,872
Creamery Butter	111,691,718 lb.	63,625,203
Dairy Butter	125,000,000 lb.	56,250,000
Condensed milk	53,662,699 lb.	10,202,230
Evaporated milk	30,469,642 lb.	3,809,653
Milk powder	7,574,668 lb.	2,178,176
Sterilized milk	7,608,927 lb.	785,044
Condensed skim milk	363,294 lb.	18,723
Condensed coffee and cocoa	531,451 lb.	147,052
Whey butter	1,516,932 lb.	757,156
Casein	109,958 lb.	19,233
Ice cream	2,996,514 gal.	4,151,949
Milk used as milk	.....	72,000,000
Cream sold (lb. butter fat)	7,379,131	5,533,098
Buttermilk sold	.....	306,235
Cheese skim milk, whey, whey cream	.....	452,009
Total Value	.....	$260,336,633

While statistics of dairy production during 1921 are, of course, not yet available, it appears that production during the year will show an increase over the preceding year. The greater part of Canadian exports of butter and cheese is from Montreal. Receipts of butter at Montreal between May 1st., 1921, and December 10th., 1921, totalled 423,428 packages as compared with 377,829 packages for the same season last year, while cheese receipts during the same period were 1,537,179 boxes as compared with 1,418,969 boxes during the same period last year.

Storage stocks of creamery butter in all Canada on November 1st., 1921, were reported as 19,693,968 lbs. as compared with 24,449,071 lbs. on the same date last year, a decrease of 4,755,103 lbs. or 19.45%. Storage stocks of cheese on the same date were reported as 22,507,681 lbs. as compared with 18,788,027 lbs. on the same date last year, an increase of 3,719,657 lbs. or 19.79%.

Exports of butter from Canada for the seven months ending October, 1921, were 5,993,194 lbs. as compared with 5,866,822 lbs. for the same period of 1920, an increase of 126,372 lbs. for the current year. Exports of cheese during the same period of 1921 were 99,710,338 lbs. as compared with 96,119,381 lbs. for the same period last year.

The decrease of storage stocks of creamery butter is much greater than the increase in exports, which is explained by a great decrease in the use of butter substitutes. The quantity of oleomargarine manufactured in Canada during the first seven months of the current fiscal year was 1,017,158 lbs. as compared with 4,007,497 lbs. during the same period of 1920. During the first six months of the current fiscal year imports of oleomargarine were 632,090 lbs. as compared with 2,395,873 lbs. for the same period of 1920.

Stocks of condensed and evaporated milk in Canada are not available but production will in all probability show a decrease as compared with that of 1920. Some of the condenseries have been closed during the greater part of the current year, the milk which was formerly supplied to the closed plants being diverted into other channels particularly the manufacture of cheese and butter. Exports of condensed and evaporated milk for the six months ending September 1921, were 20,717,261 lbs. as compared with 25,587,191 lbs. for the same period last year.

Prices paid for cheese and butter were erratic during the season. At the auctions of the Quebec Farmers' Central Cooperative Association in Montreal butter sold on different dates as follows:—

April 22nd	52¼c.
May 9th	27¼c.
June 24th	31¾c.
July 18th	41¾c.
August 15th	41⅜c.
September 6th	35½c.
October 17th	39⅛c.
November 4th	38⅜c.

At the auctions of the United Dairymen Cooperative Ltd. at Montreal No. 1 cheese sold on different dates as follows:—

May 10th	18⅝c.
June 10th	15c.
July 12th	23 11/16c.
July 29th	24c.
August 19th	21 5/16c.
September 23rd	15 13/16c.
October 27th	14¼c.
November 18th	18½c.

The average prices will be considerably lower than during the previous season. During 1921 the average of prices paid for highest quality butter on the Montreal auctions of Quebec Farmers' Central Co-operative Association was about 36⅛c. as compared with 57⅞c. during the same period last year. The average of prices paid for highest grade cheese on the Montreal auctions of the United Dairymen Cooperative Ltd. during 1921 will average about 19c. as compared with an average of about 27¼c. for 1920.

A factor in the fluctuations of prices for cheese and butter has been the fluctuation in the rate of sterling exchange. Between May and November the fluctuation amounted to about 49½c. in a pound sterling which is equivalent to approximately 3 7/10c. per lb. on butter and 2c. per lb. on cheese.

While production during 1921 appears to exceed that of 1920, owing to reduced prices net returns to the producer for 1921 will be considerably lower than during 1920. Costs of milk production have not declined in proportion to the drop in the selling value of the finished products. Costs of manufacturing cheese and butter were no lower during 1921 than during the previous year and in many cheese factories the manufacturing cost actually advanced as compared with 1920.

Cheese exports had advantage of a rising market during the latter part of June and July but had to face a falling market during August, September and October so that it is doubtful if the year has been profitable to exporters.

The Stove Manufacturing Industry

A Gradual Return to Normal

By W. S. Fisher

Enterprise Foundry Co., Limited, Sackville, N. B.

CONDITIONS in the stove business in common with many other lines in Canada, especially those connected with metals, have been very difficult. During the first six months of 1921 there was a very great falling-off in business but later there was a distinct revival in the demand. Since then there has been a considerable slowing down and we do not look forward to any very large volume of business in the near future. At the same time we feel that we are now passing through the worst and that business will gradually return to a normal basis.

Stocks of raw materials in the hands of manufacturers at the first of last year as a rule, were large and purchased at very high prices, which naturally was a great handicap and a source of considerable loss, as the stove makers felt it was necessary to do their part in the process of deflation, which meant larger reductions in prices than conditions warranted; hence many goods during this season have been sold at less than cost of production.

As to the future course of prices, an outstanding fact is that stove prices never reached the high point they did in the U.S. during and after the war, and today the reductions made on these goods in Canada are much greater than those made in the States. A recent comparison shows that many similar goods are being sold in Canada from 10 to 15% less than on the other side of the border, an evidence of the keen competition among the manufacturers here.

The matter of freight rates is a very important one in this industry, the goods being very heavy; hence, freights add a large percentage to the price. In this respect, there is probably no other line so seriously affected by the heavy freights now in force, and some relief is essential to the successful carrying on of business in a country of such wide distances as this.

Regarding wages: Notwithstanding the reductions that have been made, they still remain high in comparison with those paid in many other industries; and, while efficiency is gradually improving, there is still some distance yet to go.

While hopeful that the worst phases have been passed, we think the disposition among foundry men will be to go carefully until wages and raw materials show further declines. Before this comes about, lower prices cannot be expected.

Any Change will be for Better

W. M. Gartshore

The McClary Manufacturing Co., London

RAW materials can be obtained more promptly than a year ago, but prices are still about 50 per cent. above pre-war cost. We do not think the bottom is reached yet, but we do not look for a very great immediate reduction in price.

Labor conditions are better; capable help is plentiful; wages have been reduced about 20 per cent. but still average 50 per cent. above pre-war rates; efficiency has improved.

Demand during the year has been stagnant, and there has been no improvement up to date in the goods of our manufacture. Prices have been reduced quite in proportion to the reduction in wages and material. Some special lines are being sold at, or less than, cost, in order to create demand and that with little success.

1922 does not look very promising. We feel, however, that any change will be a change for the better, but improvement is likely to be slow. The low price of food products leaves the farmer very little money to spend. The same applies in cities where so many are out of work.

Freight Rates Hamper Industry

By W. J. Bathgate

The Percival Plow & Stove Co., Ltd., Merrickville

THERE has been no difficulty in securing plenty of raw material but the quality is inferior and not nearly as good as in past years. Prices are still high but are about 10% lower than last year. We do not think the bottom has been reached.

Wages have been reduced 25% with plenty of available help and the standard of efficiency has been maintained.

Owing to the poor crops, and low prices the farmers secured for their product, business has been very poor and there are no signs of improvement. There has been a gradual decline in prices of finished products and the bottom has not yet been reached.

We consider the high freight and express rates on the raw material coming in and on our finished product going out to be the worst draw-back and until there is a reduction in the rates in proportion to other commodities, prices will be high and no improvement in business can be looked for.

We do not consider 1922 will be a good year but feel that it will show a decided improvement over 1921 if freight and express rates are reduced in proportion to the reduction in the price of the raw material.

Six Months Before Improvement

By T. L. Moffat

Moffats Limited, Weston

THE year 1920 was a prosperous one for stove manufacturers. 1921 started off fairly satisfactorily, but the "hand to mouth" buying for present requirements only, the decrease in building operations, the very small reduction in the prices of our raw materials and the cost of labor, the abnormal freight rates, exchange, taxes and other general conditions have all left their impress on the stove business.

However, we are not down-hearted and I can assure you that the Canadian stove manufacturers are making every effort to keep the fires burning until conditions change for the better.

It is an interesting fact that the present price of stoves is 5% to 10% lower in Canada than in United States. This applies just as well to Chicago and Detroit as to Boston and New York, notwithstanding the fact that the bulk of our raw materials are exactly the duty and exchange higher than our competitors on the other side of the line. There are no coal ranges imported in any quantity from United States, but a number of gas ranges are coming in every year.

It will be six months yet before there is any great improvement in the stove trade although the prospects are that spring trade of 1922 for gas and electric ranges will be about the same as this year, providing that an immediate adjustment is made in the cost of production.

INDUSTRIAL DEVELOPMENTS OF 1921 ILLUSTRATED



Canadian Drawn Steel Company, Limited

During the year the company have built a new rough stock room, which is illustrated above, the photograph showing about three-quarters of the full length. Here is stored the raw material for cold drawn steel shafting, etc. The company also took up the manufacture of cold drawn steel in large flats up to 4 inches wide by 2 inches thick and squares and hexagons up to 3 inches.

State of Chemical and Allied Industries

Operations Curtailed

By A. E. Bonn

American Cyanamid Company, Niagara Falls

OWING to the very backward general conditions and the uncertain business outlook, operations at the Canadian works of this company were sharply curtailed early in the year. In consequence, our requirements of raw materials were much below normal. The cost of deliveries taken was somewhat less than in 1920. It is our impression that all raw materials utilized by this industry are now obtainable at reduced prices and in sufficient volume to support capacity operations.

The labor situation has been comfortable, although the rates per hour demanded by the fewer men employed, as compared to a year ago, are high and are still influenced by the rates paid by the Hydro-Electric Commission. Considering the employment situation in lower Ontario, the wage rates allowed by the Hydro-Electric Commission are somewhat puzzling.

The production of our Canadian works ordinarily goes chiefly into fertilizer distribution throughout the world. The low prices received during the past year by the planters of sugar, cotton, corn, wheat, and other farm produce were, of course, immediately reflected in greatly reduced applications of fertilizer to the spring and fall plantings. Stocks in the hands of fertilizer manufacturers and dealers immediately accumulated and caused an international depression of the markets for essential raw materials. Values of these raw materials dropped to inordinately low figures. A better feeling is now prevalent in the fertilizer consuming sections of the world, but a price recovery is not yet evident.

It is our conviction that normal markets and reasonable prices on basic commodities such as we manufacture will not materialize until railroad freight rates in Canada and the United States and labor rates as well, are adjusted to a proper basis. Foreign trade in fertilizer materials is directly affected by the weakened purchasing power of those countries recently at war and the inability of other countries to exchange their products for the dollars required to pay for the fertilizers they need.

We anticipate a gradual return to normal in our lines of trade beginning next spring Prosperous conditions do not, however, grace the present calendar for the new year.

The Salt Industry

By G. M. Duck

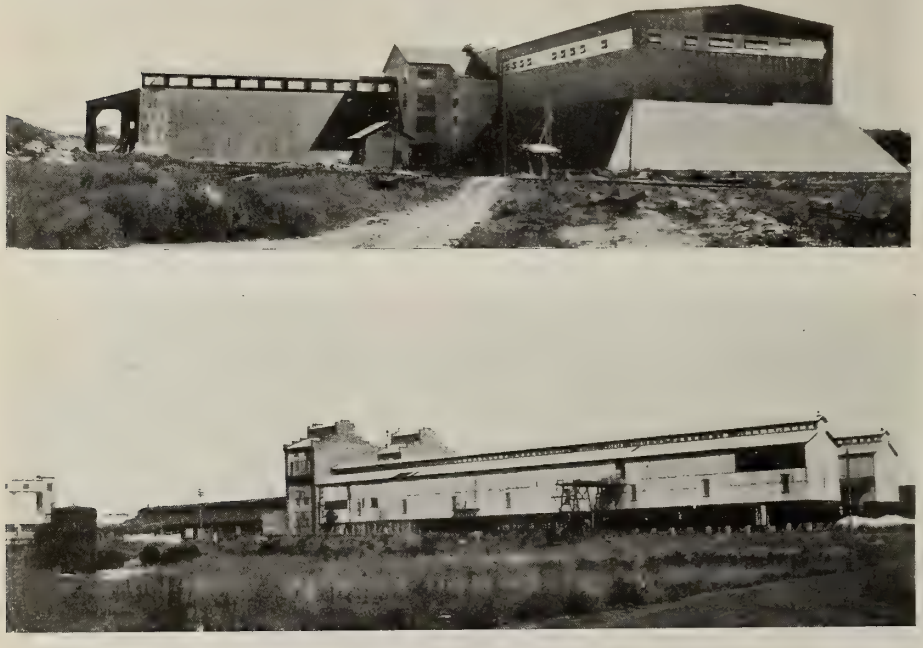
The Canadian Salt Co. Limited, Windsor

A SLOW but gradual decline in the price of our raw materials was experienced during 1921, but we do not think the bottom has yet been reached. Our employees have had very steady employment during the entire year, particularly in our salt business. Wages have come down about 25%—30% and we are glad to say efficiency has increased.

The demand for our products has been fair throughout the year, but rather spasmodic. This fall showed early improvement, but this improvement has not been sustained. Until it is possible for our railroads to materially reduce rates, we do not expect conditions to return to a satisfactory basis. As manufacturers of a staple article, we did not feel the extreme depression that other manufacturers did.

We look forward to the New Year with confidence that business generally throughout Canada during 1922 will show great improvement.

INDUSTRIAL DEVELOPMENTS OF 1921 ILLUSTRATED



Establishment of Large Chemical Industry at Trenton

The upper illustration shows the new fertilizer plant, erected by Chemical Products, Limited, and put in operation towards the end of the year. It is one of the most modern on the continent and has an annual capacity of 60,000 tons of acid phosphate or ground acidulated phosphate rock used for fertilizer. The lower illustration shows the company's sulphuric acid plant, which consists of two units, capable of producing 120 tons of acid per day. Chemical Products Limited acquired the extensive property at Trenton, Ont. of the British Chemical Co., a war-time industry and have spent the past year remodelling and adapting the various buildings for their own special uses.

The Chemical Industry

Conditions reviewed by a leading manufacturer of electro-chemical products

THERE appears to be an abundance of raw materials in the chemical industry. The quality seems to be good and prices are much lower than previously. Prices on the average are probably at least 20-25% lower than this time last year, varying, of course, with the nature of the material, the drop in some materials being very much greater.

There is a great deal of unemployment in the chemical industry, and as far as the chemical plants in Canada are concerned, most of them are shut down. Wages, of course, have come down very materially, especially for unskilled labor. Wages for skilled labor have not come down to nearly as great an extent as for unskilled labor. Efficiency of labor also has gone up considerably—at least 25%.

As far as export business is concerned, the markets have pretty largely disappeared, and this is due to the fact that the English market is flooded with German goods and it has been impossible to compete with Germany The Key Industries Bill in England, however, it is hoped will finally have a marked effect with the market in England in curtailing the amount of German goods, although even with the duty imposed on German products at the present time, namely 33⅓%, it is extremely difficult to compete with the German product, this, of course, being largely due to the very low value of the mark. As far as export business to the United States is concerned, the demand in general, of course, has decreased and the Fordney Tariff Bill has embargoed certain products made in Canada. Other materials, such as calcium carbide, still enter the United States duty-free, but the generally depressed conditions have curtailed the sale of these materials. As far as the heavy chemical business is concerned for domestic consumption, business has been very bad during the past year.

Prices have in general steadily declined during the past year but it would seem as if they had reached rock-bottom as far as the wholesale prices are concerned. Certainly, in general, there is no profit in the materials being sold today.

It would seem to me that the outlook for 1922 is not very good for the first part of the year, but it is hoped a steady improvement will set in by Spring. Present world events seem to point to the fact that conditions will improve during the coming year.

A Group of Miscellaneous Industries

The Cement Industry

By F. P. Jones

Canada Cement Company, Limited, Montreal

RAW materials are plentiful, but the price of coal remains abnormally high, this is accounted for because miners' wages have not been reduced as other wages have, because the profit on a ton of coal is much greater than it used to be; and because of the high cost of transportation from the mines to the point of consumption.

The efficiency of labor is much better than it was. In some industries costs have come down, although labor is still high compared with pre-war prices.

For the past year, the volume of sales has been disappointing, and the writer can see no prospect of good business next year.

The trend of prices of finished product during the year has been downward, but has not yet reached rock bottom, nor can it reach rock bottom until the price of coal and transportation is greatly reduced.

Business in the writer's opinion can never be normal with the price of wheat, oats, etc., as it is to-day. The farmer, or the bulk of Canadian people cannot have a proper purchasing power until the cost of coal, freight rates and other things which are abnormally high are reduced to the same level of farm products. In other words, if ten bushels of wheat prior to the war would buy a pair of boots, a suit of under-clothes and a hat, to-day they would only buy a pair of boots!

The writer does not think the worst is over, because, as above stated, the price of farm products must go up or other commodities must come down, and until the differences in prices are equalized, there can be no prosperity or contentment in the Country.

If a mechanic works for a railway company he probably gets a dollar an hour; if he works anywhere else he probably gets forty cents an hour. Therefore, how can mechanics who are not fortunate enough to be employed by the railway be content?

Canada suffers more by high railway costs possibly than any other country on account of our great mileage and few persons to the mile. The only relief the writer can see is for the Government to let the same conditions govern railway workers as any other Canadian citizens, and rail rates must come back to some reasonable advance over pre-war prices before the farmer or any other citizen of Canada can enjoy any prosperity.

By John G. Lind

St. Mary's Cement Co., Limited

PRICES of raw material are gradually coming down, and I believe have about reached bottom; and the supply is regular.

There has been an ample supply of labor of all kinds. Efficiency has gone up about 20% over that of last year. We have not, as yet, reduced wages; and with the increased efficiency, it may not be necessary.

The market for cement this year was quite satisfactory, until the 1st. of November, when it suddenly slumped.

The general tendency in prices, as far as we are concerned, has been downward, and we consider that the decrease in price for the year 1921 was about 25% less than 1920. I believe the process of deflation has been almost completed, as most goods are being sold now on a close margin.

With a low class commodity such as ours, freight rates influence the price tremendously. The average increase in freight rates on our commodity, both out and in, is about 90% since 1916.

The outlook for business in 1922 looks to me to be very encouraging, and I believe we will be able to dispose of all that our plant can produce. I believe, by the first of March, there will be a slight improvement in all lines.

The Oil Refining Industry

By S. R. Parsons

The British American Oil Company, Limited, Toronto

OUR chief raw material is, of course, crude petroleum. Earlier in the year, this reached a very low price, but has since advanced to some extent. We have found no difficulty in securing supplies of the finest quality. Present prices are lower than a year ago, and we do not believe will decline further. Any change in price will probably be upward.

In view of the excessive house rents secured in Toronto, we have not made any change in our labor costs, but have continued the bonus arrangement which we put into operation in the last year of the war. We have found no difficulty in securing any additional men, and largely through co-operative methods, our labor situation has been satisfactory.

When other manufacturers are busy, there is, of course, a necessary demand for oil products for lubrication purposes. As manufacturing in general has been rather slow during the past year, the demand for petroleum lubricants has been much below normal. Automobile oils and gasolene, however, have found a pretty steady market. We believe there is a noticeable, although slight, improvement in general manufacturing conditions, which has been reflected in somewhat increased demand of late for industrial lubricants.

The trend of prices was steadily downwards, commencing with the fall of 1920, until October of 1921, when, on account of advancing crude oil prices, the finished products took on additional values. We think that, in the petroleum industry, the prices of finished materials will be higher if any change occurs.

The very high freight rates have made difficult the distribution of petroleum products, except at prices which seem excessive. The item of freight is a very large one in connection with all our lines, and a decrease in freight rates would help to create a larger demand.

We are of the opinion that the most important factor which should tend to stabilization of the world's trade and an increase in the business of exporting countries, has been the Washington Disarmament Conference. The effect of its agreements and decisions will be to give confidence in most of the countries of the world. It is now quite clearly understood that unless the Old World countries are placed upon some sort of a financial footing where they can give out their orders for necessary imports, the great exporting countries will, themselves, remain, to a large extent, idle. The Washington Conference is the first step in the direction of world-wide commercial effort and responsibility. We believe it is going to have an excellent effect, and that export business on this continent will gradually assume a more important feature in our national economic life.

Views of Another Authority

By Prominent Oil Manufacturer

THE contraction in the markets for a number of products of crude oils caused a severe break in prices, which extended throughout the greater part of this year; but there has been, in the last month or two, a sharp upturn, and indications are that values of crude will continue to recover.

The demand for lubricating oils is a very good test of general conditions, as this product is used in every form of industry. During the first three-quarters of the year, lubricating oils were in little demand, but there has been a slight improvement since, indicating a small revival in business; but this is not important as yet.

The coming year will possibly be as uneven as the past, some manufacturing enterprises experiencing a prosperous condition, while others are likely to suffer somewhat. Freight rates are the greatest deterrent to the resumption of prosperity; but to say this, it is not necessary to blame the railroads. There is, apparently, a deadlock in the movement for the reduction in living costs. If the railroads reduced rates, it is possible labor could be induced to come down. Similarly, a further reduction in building materials might encourage a reduction of wages in the house-building trades. Perhaps the first step might be a reduction in wages paid by municipal and government authorities on new construction, as these wages are generally far out of line with the price which similar labor can obtain in the general market.

Prophecies, under present conditions, are vain. The West has had an undeniably bad year, and will start the spring seeding with impaired resources. The recovery in the foreign markets has made little progress. The most encouraging factor in the general situation is the possibility of the elimination of great issues which have been troubling the mind of the whole world. The result of the disarmament conference and of the Irish negotiations must have a beneficial effect upon world business, and it is to be hoped that, early in 1922, people everywhere will go back to work.

The Jewellery Industry

By J. C. Allan

Caron Bros., Montreal

SILVER and gold, we are under the necessity of obtaining in the United States. Gold, we cannot buy in Canada, as we are no longer on a gold basis, and the market for silver has always been in the United States. For gold, we have to pay the prevailing premium on New York funds in Canada, so that its cost varies—at the present time being about 8% above par. A year ago, however, it was 18% above par, so that there has been a considerable decline in cost. The price of foreign silver in New York is practically the same

INDUSTRIAL DEVELOPMENTS OF 1921 ILLUSTRATED



Two Views of New Packing Plant Completed at Kitchener

On October 1, the Dumart Packing Co., Limited, occupied their new plant, which was erected during the year. The building is 50 x 140 feet, four storeys in height. Its capacity is 1200 hogs per week. Since moving in from their old plant, the company have more than tripled their business and are now planning to erect an addition, 112 x 64 feet, in the spring. The industry was started on a small scale ten years ago and has had a rapid growth.

as a year ago, viz., about 65c. per ounce; but the Canadian purchaser is favored in the same way as with gold, by the decline in premium on New York funds. The decline in brass has been approximately 20% in the past year. Diamonds have also reached considerably lower levels.

In our own case, the reduction in the number of our employees, as compared with a year ago, is eighteen per cent. We have reduced the rate of pay to our operatives by about twenty per cent.

In addition to what might be called staple lines of jewellery, we deal extensively in metal products, and also special articles outside of the field of the usual jewellery manufacturer. We cannot say that, of late, we have noted any improvement in the demand for the usual articles of jewellery; on the other hand, we are quite busily employed in other branches of our manufactures.

Prices have been moderately stable during the last year. While they have declined in some branches of our trade, they have been maintained in other departments. It would be difficult to state in terms of percentage, the actual decline. It is equally difficult to state the future course of prices. We may, however, say that, in our opinion, the process of deflation has not yet been completed.

In Canada and the United States, industrial production, stimulated by war conditions, has made it more and more necessary to find an outlet in export trade. This, of course, is true and has always been true of agricultural production to an even greater extent. The value of the Canadian and the American dollar, as compared with the depreciated currency of other nations, has greatly hampered export trade. An even greater adverse influence has been the want of stability in the exchanges. The franc, the lira, the pound sterling, etc., have fluctuated so violently in comparison with our own dollar, as to make it impossible to foresee whether, when the time for payment comes, a transaction will be profitable or otherwise. There are many difficulties—political as well as economic—which interfere with the stabilization of exchange and, still more, the parity of foreign currency. The best efforts of the best minds in the world are now directed, however, towards these ends, and, without doubt, an improvement will soon be manifest. An encouraging factor in any estimate of the future is the circumstance that consumers have been holding-off buying so long that their needs must, of necessity, impel them to buy. The retailer, also, has refrained from purchasing to such an extent that he will soon find it necessary to replenish his stock; and a general demand will soon bring about increased activity to the manufacturers and the jobbers.

By Geo. H. Lees.

Geo. H. Lees & Co., Limited, Hamilton.

THE supply of raw materials throughout 1921 was about normal again, and the prices in some cases much reduced, the chief exception being the supply of gold bars. The United States supplies these bars to all their manufacturers at par value, while the Canadian Government suspended the issue of them altogether, forcing the Canadian manufacturers to purchase gold in the U.S., and to pay the high exchange.

Why does our Government not arrange to protect our manufacturers by supplying these bars the same as was done before the war?

With the exception of some extra hands pressed into employment to help meet the abnormal demand of early 1920, we have kept the whole staff employed all year, although part of the year at reduced hours. The efficiency of labor is practically the same, and scarcely any reduction in wages has been made.

The figures for 1921 show a large reduction in volume of business in the first half of this year compared with last year. The latter six months of each year will run about the same.

The trend of prices is downward, but as jewelry was not raised in price to the extent of most other lines, not much reduction can be made.

We cannot give any forceful arguments as to why times will be better in 1922, but there is a general feeling that they will, and we share in that belief.

The Brush Industry

By L. W. Simms

T. S. Simms & Co. Ltd., St. John, N.B.

BRISTLES are the most prominent factor in the raw materials entering into and affecting the price of brushes. Chinese bristles have for some years furnished the bulk of the supply for this purpose and during the latter years of the war, and up to now, have been almost the only supplies available.

Chinese bristles reached their high peak of prices in the middle of September 1920, but due to the decline in silver from that date onward, there was a marked decline until late April of this year. Since then prices have remained practically on a level. Bristle dressers have informed us from China, that, as the large factor in the advances was the silver cost, they do not look for material reductions on the primary market beyond the present level, for there has been a considerable improvement in the demand, without any tendency to over-supply.

There has been some indication of the reappearance of Russian bristles on the market in small quantities, and at somewhat reduced figures over the extremely high prices prevailing for some years past. French bristles also have shown some decline, but the quantities available in either case are not sufficient to effect the market at large.

The brush industries all over this country experienced a very quiet time, reaching its most acute stage during midsummer, when most factories were, if not quite shut down, running on very short time, with small crews. Since then, there has been quite a marked improvement in the situation, some of the plants having got back to full time again, but as far as we can gather, practically all are running on a considerably reduced number of employees to that of a year ago.

As wages in the brush business in general did not reach the extreme high peak that marked some of the major industries, which were more directly effected by the demand for labor for munitions purposes, etc., there has been no perceptible downward revision in the wage scales as yet, but there has been quite a marked increase in the efficiency of those remaining on the pay roll and of course, the reduction in staff affected mainly those who were less efficient.

Following the quietest summer experienced in the brush business in many years, there has been a steady improvement in demand throughout the fall months, and although the trade in general shows an exceptional conservatism, regarding spring booking which is usually the way in which the bulk of spring requirements are taken care of, there has been quite an encouraging immediate demand for fall business and with a few exceptions in certain sections of the country, the low stocks

on the shelves of the stores, indicates the advisability of the manufacturer being prepared for a steady and good demand through the spring months.

The brush trade quite generally throughout Canada made a marked downward revision of prices in the early summer. As cited above bristle prices reached their present levels about the latter part of April and it was on these levels that the new prices were figured. A disposition was shown to discount the future on many items, such as lumber, etc., as it was felt desirable to get brush prices down to a level where they would engender confidence for the present season's trade.

Reductions from 20% to 40%, according to the quantity of bristles used in the particular lines, were made and there seems to be every reason for believing that these prices today so correctly reflect market conditions as to warrant the confidence that these values will remain sound for many months to come.

Regarding the outlook for 1922, while probably no one is looking for any real boom for the spring season, there is undoubtedly an improvement in the feeling as reported by the various salesmen. Stocks which were not unduly heavy in most instances late last spring, have been gradually liquidated through the summer, as indicated by a marked increase in the urgency regarding delivery that accompanies many orders being received. Unquestionably, the marked caution on the part of buyers throughout the country during many months has resulted in a marked reduction in the total brush stocks of the country and even a quite ordinary consumption of brushes during the spring is bound to be reflected in a fair demand to the manufacturer.

By John C. Boeckh

The Boeckh Company, Ltd., Toronto

IN making a comparison of conditions in the brush industry with those of a year ago, it is well to remember that the general depression was not felt until the summer of this year. While conditions in other lines became very acute in the year 1920, the demand for brushes remained exceedingly good and the manufacturers were considerably behind in production. In the fall of 1920, dealers were very eager to place orders for spring shipment and anticipated their requirements for some time ahead. The demand, however, from the public dropped off considerably during last summer and dealers began to look for lower prices and refrained from placing orders except for their actual daily requirements. Prices on raw materials commenced to drop and this reduction was reflected in the finished goods last August to an extent of from 10% to 25%.

Owing to the changed conditions in demand employment naturally fell off and consequently, the number of persons employed today is considerably less than at this time last year but wages have remained fairly stationary. Wages of new hands taken on, however, are not quite as high, but this is mainly for cheap and unskilled labor.

The market for brushes is not nearly as broad as a year ago and dealers, generally, are prone to buy in small lots and delay the placing of spring orders until after the turn of the year. On the other hand, there are some sections of the country which are buying in as large, if not larger quantities, than a year ago, and this condition is due, principally, to better local conditions.

Prices of our finished products, have been reduced from 10% to 25% and from all indications which we have at the present time, the low level has been reached, and, in fact, many lines of our raw materials have stiffened and are advancing slightly in price. From this, it seems a foregone conclusion that prices will not be any lower and it is more than probable that advances will have to take place.

The outlook for 1922 is, in our opinion, bright, and we believe that all our customers who have delayed placing orders up to now for spring delivery, will order soon after the new year and, as their stocks generally are light, we feel certain that their orders will be quite equal to last year.

There is still with us the crying demand for new houses and new buildings and also re-painting, generally, and if this demand is to be filled, trade should be exceedingly good. Factories and railways also consume a very large quantity of brushes and they should be in the market in a large way next year as their requirements during the past few months have been in very small volume.

The Store Fixture Industry

By J. F. Hillock

John Hillock & Company, Limited, Toronto

IN our raw materials there has been an average reduction from peak prices of about 40 per cent. and we think the bottom has been reached. There has been practically no change in the labor situation and efficiency has been fairly good. Output has been about 10 per cent. in money value from 1920. Prices are about 10 per cent. down on the finished products and deflation has been about completed unless wages come down.

Freight rates, of course, have been a handicap to business, especially in shipping to Western Canada, as our product is very heavy and it is very costly sending it that distance. We also think express rates have been especially high.

The outlook for 1922, as far as we can see it, is, we think, very good indeed. Our line is largely in the stove fixture business and the demand for that class of goods is ever on the increase, notwithstanding the fact that times are bad. However, we think the outlook for the country as a whole is good if it only depends upon the demand for buildings.

The Brick Industry

By F. B. McFarren

Interprovincial Brick Company of Canada, Limited, Toronto

UNTIL the end of September, 1920, there was apparently plenty of brick business available for everyone, but in October new business was practically at a standstill and this continued with us until December when an increased volume of business was again available and we were able to operate our plant to capacity until the end of June, 1921.

During December, 1920, coal prices dropped considerably and it was possible at that time to make some price adjustments. However, for our financial year ending June 30th, 1921, fuel costs per thousand exceeded the previous year's costs by about 87%. Labor costs during the year, however, have been reduced by about 15% and it has been possible to get fuel at a fairly reasonable price, although the freight charges and exchange have been against a very low cost for fuel.

The mid-summer business of 1921 was not satisfactory. There was practically no big work available and, although there was a fair amount of housing work, capacity operation has not been possible, even though prices have been reduced to the greatest possible extent. Freight rates play a very important part in this industry and since the increases of September, 1920, it has been extremely difficult to compete in many markets.

INDUSTRIAL DEVELOPMENTS OF 1921 ILLUSTRATED



New Winnipeg Plant of the British American Oil Company

One of the large commercial transactions of the past year was the purchase of the assets and business of the Winnipeg Oil Company, Limited, by the British American Oil Company, Limited, of Toronto. The picture shows the refining of the former company, who have over one hundred branches and distributing stations throughout the Prairie Provinces. During their sixteen years' existence, the British American Oil Company have had a rapid expansion in Eastern Canada, and this transaction gives them a firm foundation in the West formerly covered by the Winnipeg company.

At the same time we have had a certain amount of what we consider to be unfair competition from the Provincial Government with prison-made brick, which has been supplied on various jobs at prices far below those at which commercial-made brick could be supplied.

The freight rate reductions of December 1st, 1921, have given us a small measure of relief, but we consider the present rates are still too high for this class of commodity.

During the year also, financial conditions have been such that builders have found great difficulty in financing. Manufacturing plants on the whole are over-built and there has been very little industrial construction. It seems, however, as though the general trend of business has turned the corner and at the present time we are experiencing much better conditions. Our plants are at present operating to about 85% of capacity and we expect by March or April to be operating to full capacity and feel that in the coming year, if we can just get some relief in freight rates, there will be plenty of business for capacity operation of all our plants. We might also say that capacity operation will be necessary to justify the present prices of our commodity.

Twine and Cordage

By Ernest Tailby

Doon Twines, Limited, Kitchener

THERE has been a decided slump in the price of the raw materials used in the manufacture of flax, hemp, and jute twines and cordage, during the past year. Flax can now be bought at prices 60 to 70% below those prevailing towards the end of 1920. Flax prices have probably reached bottom for the time being, but, no doubt, will again advance as soon as there is any demand for linen products. The value of Italian hemp has fallen in about the same ratio as flax, but in a somewhat smaller degree. It is difficult to forecast the future trend of prices for this material, as it depends to a large extent on the price of flax, Italian hemp, of the finer grades, being used in large quantities as a substitute for flax. There is, also, the exchange problem to be taken into account, the value of the lire fluctuating continually. American hemp is still high compared with Italian; and, no doubt, further reductions will have to be made in the price of this material. Jute is now down to about pre-war values, and will certainly advance should there be anything like a normal demand.

Labor efficiency has improved considerably during the year. A cut of 10% in wages has been made in some departments.

The trend of prices of finished products has been downward throughout the year, and further reductions may be necessary in flax and hemp twines, depending largely on the price of the raw material.

There has been a slow but steady improvement in the demand for our products during the year, culminating in November with an increase of about 50% over the same month last year. Sales, however, are still far below normal.

One of the most depressing influences in the twine industry is the suicidal competition between jobbers and small manufacturers, and no permanent progress will be made while this continues. Tons of twine have been imported into Canada during the last year, principally from Great Britain, at less than the manufactured cost in Canada. On account of the long continued depression in Great Britain, manufacturers there are dumping their stocks into Canada at cost or less than cost, assisted by the favorable sterling exchange rates, which, for some time, more than offset the duty. A number of jobbers, representing these houses, have opened offices here during the year, and may flourish until their principals demand a reasonable return on their investments. In my opinion, the worst is over, and a steady improvement may be expected during 1922. To prove our optimism, we have installed new machinery to improve our product and to increase our production.

Meat Packing Industry

By F. M. Moffat

Gunns Limited, Toronto

RECEIPTS of cattle at public markets in Canada, from January to October inclusive, were 16 per cent. less than for the same period of 1920. Receipts of sheep and lambs were 9 per cent. less. The total slaughter of hogs at inspected plants for the nine months of 1920 was 1,456,923 and for nine months of 1921, 1,211,877.

We have experienced no difficulty in obtaining supplies of such materials as boxes, paper and sundries and prices have been on a declining scale.

Labor has been more plentiful, reasonable and efficient. The present wage scale is 25 per cent. under that of 1920

Being staple food products there has been a steady consumptive demand for our product but not the same briskness as for the past few years. Export has been poor, the British market being greatly depressed by huge government stocks of bacon, out of condition, and forced for sale at low prices.

We consider that most of the commodities we deal in have declined in price to such low levels that prices may now be considered as stabilized.

Expenses of all kinds reached a peak in 1920, which represented a greater burden than business could bear. Reductions have taken place in 1921, but with the much lower commodity prices now in force, the expense ratio to prices is very much greater than in pre-war years. For instance, freight rates are 130 per cent. of pre-war rates, while the prices of some commodities against which they apply, are 80 to 100 per cent. of pre-war values. There must be a further early and substantial reduction in expenses, such as freight and express rates.

We are confident that the worst is over in our line of business. Factors making for better business are much lower values and lower wages, combined with greater efficiency.

A New Plant



Federated Press, Limited

This company acquired the "Belgo" Building on Bleury Street, Montreal, during 1921, and are moving into it next May. As will be seen from the photograph, the building is an eight-storey one. It contains over 50,000 square feet of floor space. The Federated Leather Goods Company, Limited, a subsidiary of the Federated Press, will occupy one floor of the new premises.

Business Machines

By F. E. Mutton

International Business Machine Co., Ltd., Toronto

WE do not find any difficulty now in obtaining the kind of raw material we require in our business. It is much less difficult than it was a year ago. The price of raw material has considerably decreased, in some channels, of course, more than others, and there seems to be an indication that there will be a further decrease.

We have found it quite possible to secure all the labour desired and of the quality desired. Wages have decreased between 15 and 20%. Efficiency has increased perceptibly.

The markets for some of our products have shown quite a line of resistance, apparently a buyers' strike. Our scale products, however, have shown a very healthy increase this year and the same applies to the Hollerith tabulating and sorting machines.

We consider that the trend of prices has been slightly downward, but not at all perceptible. It is difficult to say whether the process of deflation has been completed.

Freight rates have had a good deal to do with the line of resistance against sales. It is quite apparent what Canada needs today very much is reduction in freight rates, also passenger rates, if we are going to have the circulation of the public, which in itself would bring about improved business conditions.

We feel a good deal depends on the result of the election. If a tariff party is elected, we are quite confident that the worst is over and that a gradual improvement should be looked for, and increased confidence will be the result.

It would seem that the lack of business can almost be traced to lack of confidence.

Fibre Products

By T. E. Webster

Diamond State Fibre Co. of Canada, Limited, Toronto

PRICES on our raw materials have fluctuated considerably and are well below the prices of a year ago. There has been a tendency to advance in some materials recently which leads us to believe that the bottom has probably been reached.

Cost of labor has decreased approximately 20% from last year, and we believe we are getting more efficient work.

We have found, of course, that no manufacturers are buying in advance, and will only place specifications for their actual requirements for whatever business they have in sight. July and August were our poorest months, but directly after the Exhibition, our sales picked up, and considering everything, we believe we have had a very fair fall.

Our business is of course a little different from some, inasmuch as we sell to so many different trades. For instance, we supply electrical trade with insulation, bushings, silent gears, washers, pulleys, etc.; textile mills with fibre receptacles, warehouse cars, fibre wheels, noiseless waterproof gears, pulleys, bobbin heads, picker sticks, etc.; industrial field; trunk fibre, wheels, pulleys, gears, rollers, tire separators, washers, bushings, and all sorts of special shapes; automotive industry with insulation, silent timing gears, gaskets, washers, wire manifold tubes, handles, parts for starting, lighting and ignition systems, etc.; transportation field, fibre track insulation, gauge cock handles, gaskets, engine box liners, ferrules, bushings, noiseless gears, etc.; mechanical field, pump valves, sugar discharger tips, bearings, brake shoes, frictions, pinions, pulleys, rollers and many other parts.

Our prices have been reduced approximately one-third, and we believe that in most cases they have reached rock bottom, and it is possible there may be slight increases in some lines as we are now operating at a loss in some departments.

We are of course seriously handicapped by high freight rates, and find it hard to compete on Western and Maritime business. Any possibility of further reduction in this direction will help manufacturers and general business considerably.

There is no doubt but that there are no stocks on hand at the present time, and every indication points to considerable business moving shortly after the New Year. It would seem that building must start, and this will of course create business, which will effect practically all industries. There seems to be a generally optimistic feeling, and we are looking for business to be practically back to normal by Spring of 1922. The trouble with a great many firms has been that they are considering business which existed during the war as normal, and there is also a tendency to endeavor to maintain the high salaried positions which existed under the abnormal conditions during the war.

Underfeed Stokers

By G. G. Mills

The Under-Feed Stoker Company of Canada, Limited, Toronto

IN the past twelve months, there has been such an extreme reversal of conditions in practically all the phases of trade that it is difficult to make any really comprehensive review of the situation. Raw materials have swung from an almost impossible situation, from the standpoint of supply to the direct reverse, but this change has not been followed by what we might have expected as a logical decrease in price, though truly a certain price reduction is apparent.

The discrepancy between the price reduction and the increase in supply, of course, can be laid to the door of decreased demand and is affected strongly by the factor of transportation charges which have not diminished in direct relation with the general trend of the times.

In our particular industry, labour conditions are vastly better when looked at from the standpoint of supply or wage payments. The changes in these two elements, raw materials and labour, are the ones which have a direct influence to the good on manufacturing conditions and prices, but they are handicapped in their effort to better prices by the fact that the market today, though a buyers' market, is so tremendously reduced that the overhead of manufacturers in certain lines such as ours, has increased by leaps and bounds on a percentage basis.

It is a well-known fact that markets depend entirely on purchasing power and the desire to use it. Today, both these factors are tremendously diminished, the first to approximately 50%, according to statistics, and the second to almost vanishing point.

Having consideration for the conditions existing in the three items noted, that is, raw material, labour and markets, prices, while while having a downward trend, have not been and we do not believe will be as much lower as the purchaser generally looks for.

While we do not believe that rock bottom has been reached, insofar as prices are concerned, we are confident that they have not much further to drop in our particular instance, and the revival of the market in general, we believe, will be affected by the increase in purchasing power of the industries which we supply, which in turn can only be brought about by a better balancing of wage payments.

We look forward with considerable hope to the coming winter in its effect on labour in general to bring about something more nearly approaching stability in the matter of wage payments.

To us the outlook for 1922 is brighter than the period through which we have passed. While we believe that the depth of depression, if not past, is immediately present, we think that recuperation and convalescence is going to be a long and painful period for the country in general and we deplore the attitude taken by certain elements of the press in so heartily endorsing and setting forth expressions of what we believe to be a false optimism, which, in our experience, amount in some cases to a forced self deception. Frankly, we cannot see how this attitude is sound.

On the other hand, we do not feel at all pessimistic as to the future, even the immediate future, and would be sorry to see a mushroom growth of trade in the year 1922 as it could not be on any healthy basis. Slow and stable betterment, we believe to be the keynote of the success of this country's immediate future.

You ask for emphasis to be laid on such features as we believe tend to inspire hopefulness. One outstanding feature to us is the fact that manufacturers, and practically the country at large, have come to the realization that only through co-operative effort can anything be accomplished and, as this condition spreads, it cannot help but have its effect.

Clay Products

By T. Graham

The Alberta Clay Products Co., Limited, Medicine Hat

AS WE lease or own our clay lands, we can regulate our own supply of raw material. With regard to labor, we are employing considerably fewer employees than a year ago. Wages have been reduced 10 per cent., and labor is more efficient than it used to be.

We did a good business during 1921 in small size sewer pipe, but there has been practically no demand for large sizes or building tile. Trade, at present, is the worst in our experience; but we are optimistic as regards 1922 business. Prices have ruled somewhat lower than in 1920, and we expect further reductions during the coming year.

Future business is very doubtful at present, as everyone is waiting on the lowering of prices. The general feeling is that building will be better in 1922.

INDUSTRIAL DEVELOPMENTS OF 1921 ILLUSTRATED



Plant under construction at Winnipeg

In this factory the Winnipeg branch of the J. R. Watkins Company will manufacture their lines of toilet articles, extracts, spices, veterinary and domestic preparations. When completed, the plant will have a floor space of approximately 80,000 square feet. It is built of reinforced concrete, trimmed with Tyndall stone and faced with Sidney brick on all four sides. There will be nine storeys with a penthouse, 20 x 30 feet, running up to the height of two additional storeys above the main roof.

Paint and Varnish

General View of Industry

By George Henderson
Brandram-Henderson Limited, Montreal

IT is quite a year since I advised that the difficulties attending the acquirement of raw materials had about disappeared. They have now entirely vanished and we have no difficulty in securing, at prices which in my opinion are not likely to go lower, all the very numerous supplies needed by this trade. The quality and uniformity of these materials are now at a pre-war excellence, and the delays in deliveries which eighteen months ago, and back of that, were so great a menace, are now entirely a thing of the past. Quite a number of raw materials, such as pig lead, china wood oil, certain varnish gums, and turpentine reached the bottom during the year now drawing to a close, and are now costing considerably more than they did in the summer and spring. As an instance of this, pig lead is now selling f.o.b. London at £25.10.0 per ton of 2240 lbs. and in Montreal at $6.25 per 100 lbs., whereas in February it was as low as £16.10.0 London and $5.05 Montreal. Turpentine was selling in March last at 45½c Savannah per wine gallon, and to-day is selling at 73¾c. or an equivalent of $1.10 per Imperial gallon Montreal.

The labor market has improved in several respects. Not only is there now an abundance of labor procurable at much more reasonable rates than during the greater part of the year 1920, but the labor is more efficient. I would wish to be understood as meaning in this regard that as far as our experience is concerned there is a much more kindly and unsuspicious attitude in evidence. The passing of the hurly burly and fierce pressure of production with its overtime and misunderstandings has permitted the employer on the one hand and the artisan on the other, to more appreciate the fellowship of man. Each is more willing to regard the other as not entirely selfish and as wishing the common weal. From this attitude rises the concept that production, satisfactory as to quality and quantity, is equally in the interest of all concerned. The period of murmurings and threats, the time of lock-outs and strikes, has passed away, and all we need to-day is a greater home and export demand to render our small contented industrial family an equally contented large one.

The falling off in the home demand for our products which was encountered during the year, was due pre-eminently to the restriction of construction operations, and not to an absence of repainting work. Indeed the paint industry experienced during 1921 a distinctly increased demand in paints for this purpose. This was in a great measure caused by the conviction that the prosecution of thrift involved the minor expense of purchasing paint for the protection of surfaces. The public, from one end of the country to the other, has been appreciative of this, and there is every indication that its attitude is becoming still more accentuated.

There has been great deflation during the year in the prices at which our finished products have been sold. Take for instance, first quality house paints. In December of last year (1920) a reduction of 50c per gallon was put into effect by almost all manufacturers; again in February a further 70c. reduction occurred and in September another, and I believe final reduction of 50c. was effected. This means a total reduction of $1.70 per gallon or about 35%, and should, beyond question, be final, as, since the time of the last reduction, important raw materials have advanced in value, and, moreover, the selling prices on the finished product are now cheaper in relation to the cost of application than they were before the war.

Naturally we would like to see lower freight rates, and we expect we will get them in time. I regard freight rates almost in the light of a commodity. Some commodities declined a year ago, others did not do so until later and again others only very recently; some have not yet declined. There was a good reason for what happened or did not happen in each case. We believe this to be so with regard to freight rates, and consider it is far more important, in the general good, to do the best we can with that measure of improvement in conditions that has occurred than to be too militant about getting everything right all at once.

I am optimistic for 1922. The paint and varnish industry is an essential one: one that has many very fine characteristics. The manufacturer of paint and varnish not only makes his own commodity, but he produces something, the subsequent employment of which is, in the vast majority of cases, either essential to the finishing of the product of his fellow manufacturer or necessary to its continued life.

I do not wish to imply by anything stated that because of the peculiar characteristics of the paint industry it will prosper while possibly other industries will languish, for it is my opinion that in industrial life generally the worst is well back of us and that the deflation which has occurred, bringing with it a more normal and settled condition of mind among our citizens, will ensure a gradual and steady improvement in demand for the whole of the year 1922.

Passed the Worse Period

By Royal Cluxton
The Canadian Paint Co., Limited, Montreal

PRICES on our raw materials are from ten to twenty per cent. lower than last year, and the bottom seems to have been reached. The re-adjustment on labor has been completed and the best of efficiency is being maintained.

There is a decided improvement in sales to the dealers, merchants and jobbers, while sales to the manufacturing industries have shown a marked falling off, but recovery of the manufacturing business will undoubtedly begin to take place in January.

Prices on the finished products have apparently reached the bottom and no change is likely for at least a year, of any consequence.

The high freight rates, as well as high passenger rates, which affect travelling expenses, are undoubtedly a factor in curtailing business with the manufacturers and a reduction in freight rates as well as passenger rates would go a long way towards restoring normal conditions in the industrial lines, as both of them enter very materially into the cost of manufacturing and marketing the finished products.

We are absolutely confident that we have passed through the worst period of depression and that the retreat has been completed and we are now going forward again and will continue to do so for a long period.

Metal Industries

Market Very Quiet

By Geo. Clapperton
The Bennett & Wright Co., Limited, Toronto

OUR raw materials have been in plentiful supply, with quality only fair and prices ruling about 20 per cent. lower. Employment is down about a third; wages are the same and efficiency much better. The market is very quiet. Prices have gradually declined but I do not think they have yet reached bottom or that deflation is over.

If the fiscal policy of the country was settled, with a fair protective tariff insuring our industries against destructive competition and with a further decline of about 20 per cent in costs, we consider that our business outlook as contractors would be much improved.

Looking for Upward Trend

By W. J. Mills
Maxwells, Limited, St. Marys

HAVING stocked heavily with raw materials a year ago, our purchases during 1921 have been very light. Deliveries have been prompt, at lower prices, with, we believe, still lower to come. Wages declined 10 per cent. during the year, and we are now employing only about half the number of men we had a year ago. Labor is more efficient.

Prices are still going down, with the bottom of the chute not yet in sight. The buyers' strike is still operative, and, until broken, retailers are not placing orders. We cannot see that conditions can be any worse than right now, and so look for an upward trend. Improvement will, however, be gradual, and, in the meantime, the manufacturer can only hang on, advertise, watch and pray.

Continued Improvement Indicated

By R. H. Combs
Prest-O-Lite Co. of Canada, Limited
Canadian National Carbon Co., Limited

THE condition of the market for raw materials used by both of our companies in the manufacture of our product, is very satisfactory as regards the quality and supply and price conditions are becoming better all the time—in fact, in some lines this condition is now very satisfactory and in other lines the tendency in price seems to be downward. Prices are considerably lower on many of these lines than they were a year ago and a little lower on all lines. Undoubtedly bottom has been reached on some lines but possibly 30% of the raw materials used in in our processes are still from 10 to 30% too high, the worst offender in the lot of materials being coal.

I note very little change in the condition of employment, as compared with 1920. Wages have come down somewhat; but the adoption of piece-rates, instead of hourly rates, has been responsible for most of the reduction in our labor costs: which condition has been brought about by higher efficiency in our employees rather than actual reduction in earnings. All lines manufactured by us, which are not closely associated with the automotive industry, have met with much improved market conditions during the past year: lines which hook in with the automotive industry, have been very disappointing—particularly in the earning power of the company in the manufacture of these lines, owing to the very severe cuts in the market prices of all goods used in the automotive industry, rather than to a diminished production.

The trend of prices of finished products, manufactured by this company, has been sharply downward, especially products which have to do with the automotive industry, some of which—particularly electric storage batteries—are lower than they ever were before, and in this particular line, deflation has been overdone. Other lines, manufactured by us, we feel, are now at rock-bottom or very close to it, depending on the future of the market of certain materials, referred

to above, as well as the question of whether or not any higher efficiency may be had from labor or whether deflation in other lines will permit of further wage reduction. In this connection, we feel that any further deflation will come about very slowly, the process perhaps requiring a period gauged by years rather than months.

We certainly feel that the worst is passed, and that from now on improvement may be looked for; in fact, the trend of our business indicates continued improvement, but we are not looking for any great improvement until possibly May or June or later in 1922. Undoubtedly, the liquidation of large inventories has proceeded satisfactorily, with steady improvement in the cash position of commerce and industry; and the satisfactory crops of 1921 have assisted materially in the reduction of the indebtedness of the agricultural community.

Low Stocks Are a Help

By J. H. Webb
Jenkins Bros., Limited, Montreal

THERE has been an over supply of some of the raw materials we use, although the supply has been ample, on the whole, and the quality good. Prices have, at times, been erratic, on account of the over production on such metals as copper; but steel has remained much stronger than was expected. In the case of the copper market, we believe that it has reached the bottom, and the tendency now will be upward. In the steel situation, we feel that the bottom has not yet been reached.

There has been quite a bit of non-employment during the past year. We have not been working to full capacity by any means. Wages have come down anywhere from 10 to 40%, and there has only recently been shown any marked difference in the efficiency of labor. It would appear, however, as though that also was on the upgrade.

The market for our product has not been very good for the past year, the feeling generally being, throughout the country, that prices would drop; and everybody was holding off for lower prices. It is generally felt that the bottom has been reached, but we do not look for any improvement until the beginning of the new year. The tendency for prices has been downward throughout the whole year. We consider that prices have reached rock bottom, and the tendency, in the future, will be upward

We believe that the year 1922 will be a much brighter year, as we believe that stocks are low everywhere. Jobbers have been looking for lower prices, and have kept their stocks down. Now that the trend is upward, the tendency will be to complete their stocks before the market rises very much.

Biscuits and Confectionery

Poundage About Equal

By A. D. Ganong
Ganong Bros., Limited, St. Stephen, N.B.

RAW materials are lower than last year. There has been a general decline and where it was very difficult to obtain supplies, practically everything is now easily obtainable. Sugar and a few other materials will decline, but the big decline has taken place.

Labour never obtained the increase that it did in several industries such as railroading and the decline in labour will be small, but with competition for positions we will have better efficiency.

The poundage sold in Canada was about equal to 1920, but we miss export business and the big decline in price has made a reduction in our sales. There will be a further reduction in price but this will be small compared with the reductions already made. Reductions in freight rates will be a help but we would like to see reductions to competitive points in place of a percentage reduction, which tends to localize business.

We are not looking for any improvement until the beginning of summer. We feel the one thing we need in Canada above everything else is an active building year. Houses and construction of all kinds are badly needed and with the increase in price of bonds and the corresponding decrease in returns, capital will turn to building and if so will give us the start we need.

Product In Increased Demand

By Harvey Shaw
North-West Biscuit Co., Limited, Edmonton

DURING the past year, we have been able to secure raw materials at a considerable saving in price over 1920, and with a promptness in delivery which has enabled us to save considerably in not having to anticipate our wants so far in advance. We do not anticipate a still further decline of any consequence in raw materials for some little time to come, at least not until a very material reduction has been made in freight rates.

The labor situation to us here has been one of little concern, as we have had plenty of help offered and of a very desirable kind. The only change upto the present time that we have made in wages, has been a withdrawal of a bonus of ten per cent. which was paid up until March 1921; further than this, no reduction has been made, though on the other hand, with the reductions in price of raw materials, we have been able to reduce our prices to the retailer approximately thirty per cent., as compared to December 31st., 1920, and to this reduction we attribute very largely the increased demand for our products and a freer buying spirit, which was not in evidence this time last year.

With the thirty per cent. decline now in effect, it would hardly seem possible that any further decline of consequence can be made within the next year, unless of course, a very decided reduction is made in freight rates, which we hardly anticipate.

We occupied October 15th, our new premises which represent an investment of nearly one-half million dollars and feel that, with lower prices and a general revival of business the year 1921, holds in store for us the largest sales which we have ever had; in fact, we are most optimistic as to the future business not only in our line, but all lines for Western Canada.

Appointed Agent For Australasia

C. A. Hayes, vice-president in charge of traffic, Canadian National Railways, announces the appointment of Geo. E. Bunting, Australasian manager for the Canadian Government Merchant Marine Limited, to act also as general traffic agent for Canadian National Railways. Mr. Bunting is to have general supervision in New Zealand and Australia of both the freight and traffic interests of Canadian National Railways. His office will be in Auckland, New Zealand.

Business Outlook for the Year

By GRAHAM F. TOWERS
Superintendent, Foreign Trade Dept., The Royal Bank of Canada

A YEAR ago, declining prices had already given to Canadian manufacturers a foretaste of what was in store for 1921; and so, a year ago, 1921 was being looked forward to with some apprehension. The twelve months have gone by, and the vast majority of Canadian manufacturing concerns have come through them successfully—a tribute to the wise use they made of war-time profits, and to the support extended by the Canadian banking organization. The situation is now robbed of its elements of unexpectedness. Manufacturers have had time to bring their stocks down to a point in keeping with present conditions. From May 1920, until comparatively recently, their main problems have been those arising from this necessity of disposing of high priced stocks, and keeping their companies in at least a moderately satisfactory liquid position. This part of the depression period may now be looked on as practically over. Its problems are replaced by others. Manufacturers now have to find a way of selling their goods to consumers whose incomes have been drastically reduced during the last eighteen months; reduced, so far as the farming population is concerned, by an excessive decline in the price of agricultural products, so far as the industrial population is concerned, by unemployment and some cuts in wages. It is a platitude to say that, up to a certain point, the lower the price of an article, the more of it can be sold. But too much emphasis cannot be placed on the fact that, in times such as the present, when the purchasing power of a large section of our population is below normal, price becomes important as never before. Every effort should be made to bring costs of production down. Economy in management and operation, increased efficiency, and a wage scale which does not represent an excessive charge on each article turned out, are prerequisites to the satisfactory operation of our factories.

Foreign Trade

Last January, any survey of business was forced to note with regret that extravagant purchasing during the preceding twelve months brought the year 1920 to a close with an excess of imports amounting to $64,000,000. This year, no such regret is necessary. The first eleven months of 1921 resulted in a $23,000,000 excess of imports over exports of Canadian produce, but it is quite possible that December statistics will show a favorable balance large enough to wipe out this amount of 23 millions. These favorable results were brought about by economy in purchases, lower prices for imports and a continued large volume of sales of the main products of Canada—necessities of life. Our foreign trade is then, in many ways, on a satisfactory basis. One flaw in it is the fact that the foreign demand for many of our manufacturers has been poor, another, is the low price obtained for agricultural products. The low purchasing power of many of the countries buying the latter does not encourage the belief that they will be able to buy, at much higher prices, the quantity of foodstuffs and raw materials which Canada and other producing countries have available for sale. The goal of these countries therefore should be a reduction in the cost of production to a point where present prices will represent an adequate profit.

When the farmers have successfully made this adjustment, and when manufacturers have so far reduced their costs as to bring the prices of manufactured goods into normal relation with the prices of agricultural products, the field will be clear for a real and permanent improvement in business.

Postal Changes

Effective January 1, 1922

IN conformity with postal changes adopted at the Universal Postal Union Congress held in Madrid last year the following postal changes affecting certain matter mailed in Canada became operative on the 1st January 1922.—

Letters.—The weight of a letter to any place outside of Canada must not exceed 4 pounds, 6 ounces. A letter to any place outside of Canada must not measure more than 18 inches in any direction; unless in the form of a roll, when a length of 30 inches is allowed, provided the diameter does not exceed 4 inches.

Postcards.—The public is forbidden to join or attach to postcards samples of merchandise or similar articles. Nevertheless, illustrations, photographs, address cables or slips to fold back for address purposes, labels and cuttings of any kind may be affixed to them, provided that these articles are not of such nature as to alter the character of the postcards, that they consist of paper or other very thin substance, and that they adhere completely to the card. With the exception of address labels or slips, those articles may only be affixed to the back or to the left-hand half of the address side of the postcards.

Printed Papers.—The maximum weight of a single book to places outside of Canada with the exception of the United States and Mexico (to which places the maximum weight for a single book is 10 pounds) is fixed at 6 pounds 9 ounces.

Cards of invitation and notices of meetings in which the name of the person invited, the object and the place of the gatherings are indicated in manuscript or type-writing, are no longer considered as printed papers, and are not allowed to pass at the reduced rate of postage applicable to printed papers, but are liable to first-class rates of postage (letter or postcard rate as the case may be).

To indicate in manuscript in advices of the despatch of goods, the date of these despatches is no longer allowable at the reduced rate of postage applicable to printed papers, but such matter is liable to first-class rates of postage (letter or postcard rate as the case may be.)

Printed Papers for the use of the Blind.—The maximum weight of a packet of printed papers intended for the special use of the blind to places whether within or outside of Canada is fixed at 6 pounds, 9 ounces, but may not exceed the dimensions prescribed for other classes of printed papers.

Samples.—The maximum weight of a sample to any place whether within or outside of Canada (except the United Kingdom and the Straits Settlements) is fixed at 1 pound. The maximum weight of a sample to the United Kingdom and the Straits Settlements is 5 pounds.

Blocks used for printing, engraving etc., are now admitted at the sample rate to any place, whether within or outside of Canada.

Dyes such as aniline, etc., are not admitted at the sample rate to any place whether within or outside of Canada unless enclosed in stout tin boxes, placed inside wooden boxes with sawdust between the two covers.

Reply Coupons.—Persons wishing to prepay a reply to a letter sent to a place outside of Canada, with the exception of a place in the Empire, the United States or Mexico, will forward two Reply Coupons instead of one.

Reply Coupons are valid for two months after the month of issue in all cases, and six months after the month of issue when issued by countries overseas. Not more than 10 coupons may be sold to, or exchanged for any one person in one day.

Unpaid and Insufficiently Prepaid Articles.—Correspondence of every kind (registered or unregistered)—other than parcel post—coming from or addressed to any place outside of Canada, with the exception of the United States and Mexico, not prepaid or insufficiently prepaid, is liable to a charge equal to double postage or double the amount of the deficiency to be paid by the addressees; but that the charge may not be less than 30 centimes (6 cents).

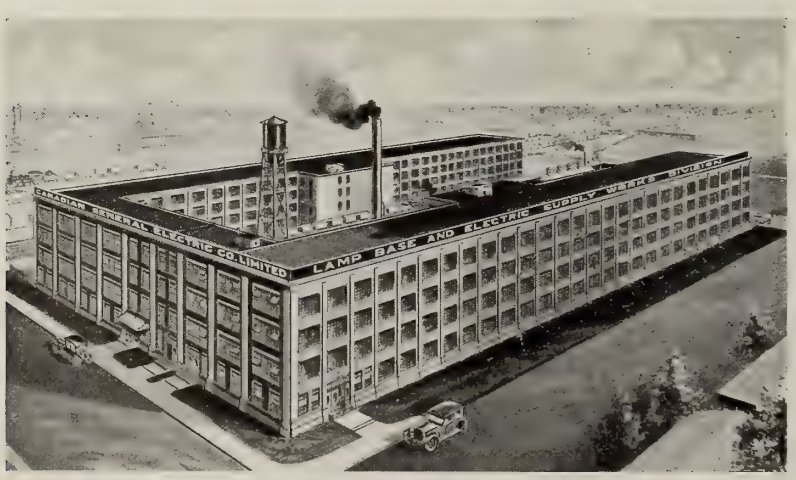
Articles Addressed "Poste Restante".—The addressee of articles addressed "poste restante" must give the names of the addressee; the use of initials, figures, christian names without surnames, fictitious names or conventional marks of any kind is not admitted for these articles.

Postage Prepaid in Cash on International Mail Matter will be Indicated by Stamped Impression.—The postage on letters and other articles of mail matter coming from places outside of Canada may be prepaid in cash in future, as well as by means of postage stamps affixed. When prepayment has been made in cash, the letter or other article will bear a stamped impression in bright red colour in the upper right hand corner of the address side, which will show the name of the country of origin and the amount of postage prepaid.

Prohibitions.—It is forbidden to send or receive by post to or from places outside of Canada, opium, morphine, cocaine, and other narcotics.

Envelopes which are entirely transparent or have an open panel are prohibited transmission to places outside of Canada, with the exception of the United States and Mexico.

INDUSTRIAL DEVELOPMENTS OF 1921 ILLUSTRATED



New Electric Plant in Toronto

This addition to the manufacturing buildings of the Canadian General Electric Company, Limited, is situated on the north-west corner of Wallace and Ward Avenues, Toronto. The main building is 4 storeys high and 384x72 feet. The wings bring the total floor space to 122,756 square feet. The site on which the plant is built is 215x990 feet, and the Company have a private railroad siding 950 feet long, connecting directly with the main line of the Canadian National Railway.

Shipbuilding in B. C.

By E. W. Izard
Yarrows, Limited, Victoria

THE condition of the market in regard to raw materials for shipbuilding, ship repair work and general engineering has been considerably improved during the past year. The supply is easier and quality better; prices are considerably reduced when compared with a year ago. At the present time there is a small upward tendency as regards non-ferrous metals, which would indicate that the price in this particular line has reached the bottom. However, on most other lines, we are anticipating further slight reductions.

The employment situation is very serious, as it is exceedingly difficult to obtain sufficient work to keep the regular employees going, and the casual workers are experiencing hardships. The supply of labor is considerably greater than the demand. Labor costs are much reduced and have gone down 20% during the year. The efficiency of the workmen has increased by approximately 10%, this being partly brought about by the decreased influence of the unions, and the necessity of a man holding his job.

During the last year there have been very few shipbuilding orders offering, and ship owners have been only putting in hand those repairs which are absolutely necessary for the safety of their vessels. From this, one assumes that in the near future the conditions for ship repair work will be improved, as it will be necessary for ship owners to have their vessels put in better condition. The deflation of prices for new and repair work has, to my mind, been nearly completed, owing to the necessity of reducing prices in order to obtain work of any kind to keep the various plants going, although the prices of raw materials and labor are still likely to decrease.

As regards the outlook for the future, one is inclined to feel that the worst is over, and although we do not anticipate anything approaching a boom, we rather look to see a steady increase in business during 1922. this being principally due to ship owners and others realising that labor troubles are practically at an end, and that prices are as low now as they are likely to go.

U. S. Building Prospects for 1922

An encouraging report of the year-end is that showing the building operations of the past year and the prospective building activity of 1922, as estimated from known contracts outstanding. These figures show a steady resumption of activity on a large scale, and point to 1922 as a year of heavy building operations. The amount of contracts carried over from 1921 are reported to be as large as the entire building operations of the year. To this will be added the new spring and fall contracts of 1922. The wide ramifications of the building industry give great industrial importance to this prospective increase of activity.

A Review of Conditions in Other Countries of the World

IN THE preceding pages, a summary of conditions in various industries in Canada has been given. In the following pages an endeavour is made to make the beginning of a review of conditions in other countries. Our nearest and some of our best export markets are dealt with, and this service will be continued in later numbers by giving reviews of more remote countries which offer export fields to Canadian producers.

The sum of most opinions seems to be that the worst of the depressed conditions has passed. The depression started in the far East, reached Great Britain and Europe by way of North America, and although the aftermath of the war has left extraordinarily bad trade and financial conditions in Eastern Europe, these markets are only a segment of world markets, and while they must again reach a stable financial and commercial basis before any country in the world reaches its pre-war level of prosperity, great strides towards that goal can be made by serious and intensive cultivation of other export markets and by the exercise of the keenest competitive methods yet called for in any stage of our economic history.

The year 1921 in all countries has been one of continued liquidation. Heavy inventories have been made light. Goods made from high-priced stock have been gradually worked off. Bank loans have been greatly reduced. In most countries, imports and exports have come more nearly into balance. Coupled with the slight but fairly general revivals in trade, where previously it had been dead, these factors point to the conclusion that former customers must once more come into the market. Heavy financial obligations, the experiences of the past eighteen months, have made everyone cautious. It will still be a buyer's market and the keenest kind of sales policy will have to be followed if any degree of success is to be achieved. The world's work is going to be carried on; and to have it carried on, goods are needed, but the buyers have still the advantage and must be sought out. False optimism is the worst equipment that any trader can have at this period; but steady plugging can turn the present favorable omens into the grounds for real optimism at a later period.

On the whole, Canada's export showing for 1921 has been very creditable. Owing to reduced prices, the $395,000,000 worth of vegetable products exported in 1921 probably mean more in quantity than the $412,000,000 exported in 1920. Most manufactured exports show so great a decline in values that it is certain that quantities were also greatly reduced; but the values shown are still an indication that Canada's exports of manufactured goods by far surpass her efforts before the war. The spirit of the exporters is such that we may be sure a great fight will be put up to maintain and to increase the trade we have.

We still get the 99% drawback. Preferences have been increased in some countries. Australia and France are constantly being confronted with the fairness of Canada's position in asking for improved conditions of entry into their markets. Canadian exporters are becoming keener to seize and use every advantage that they can acquire.

The most outstanding example of this keenness is shown in the formation of the Canadian National Export Club and its affiliated local clubs. The exporting manufacturers of Vancouver and district, Montreal and district, Toronto, Hamilton and the surrounding towns and cities have all banded themselves together to discuss all phases of export work among themselves and getting the hearty assistance of well qualified experts in different phases of export work. Meetings are held regularly, for each of which an interesting programme is worked out. Discussions of the different ways in which exporting may be done—direct, by export and import houses, by agents, etc., etc.—are frequently held. Marine insurance, freight rates, financing, markets and many other related subjects are handled with increasing interest. The members are keeping in close touch with one another, exchanging information and helping each other out of difficulties.

Reports of the local meetings are forwarded to the National Club which acts as a clearing house and keeps the local clubs in touch with one another. The National Club also arranges for the publication of reports on various countries where markets exist for Canadian products and later issues the most valuable of the information thus obtained in booklet form. An occasional bulletin is furnished to all members, giving information not published broadcast and maintaining the interrelation of the local clubs. Already many interesting points have come up which can only be satisfactorily settled to the advantage of Canadian exporters by having the men most vitally interested in them in all exporting centres, put their minds to the questions and clearly formulate their views. When this is done, it is usually found that some department of the Canadian Manufacturers' Association has the best facilities to forward these views with the powers that be. These clubs are distinctly not marketing organizations. Marketing is the problem that the individual must solve for himself; but there are many kinds of assistance that can be obtained from individual members, from men with whom the exporter is brought in touch through the club, and from well-organized joint effort.

—ALEX. MARSHALL.

Commercial and Industrial Conditions in the United States during 1921

By O. P. AUSTIN

Statistician of the National City Bank of New York.

PRICE readjustments at home and abroad have given to the United States the same "bad half hour" in 1921 which has characterized conditions with her neighbors in America and in other parts of the world. It began with that sturdy basic element of our population, the farmers, who found the prices of their products and therefore their income rapidly diminishing in the early part of the year and, as their facilities for resistance to the reduction of their earnings were less effective than those of the more highly organized forms of labor, their only means of meeting the startling reduction in their earnings was a corresponding reduction in their expenditures. They could make last year's suit serve for another year; they could stop their purchases of automobiles and make the farm machinery operate for another season; they could make the products of their own acres a larger part of their daily food supply, and in many other ways could minimize the expenditures which had characterized the period in which they were receiving abnormally high prices for their products. And with the sturdy good sense and firmness of determination which characterized the agricultural element everywhere, they did it, and the "open door" of the homes of this biggest element of the biggest agricultural nation of the world, while not absolutely slammed shut, was so narrowed that the market which it offered was greatly minimized.

The effect of this heavy reduction in the purchase of the biggest single element of the population of the country soon made itself felt in the manufacturing industries. They sold less of textiles, less of household requirements, less of automobiles, less of farm machinery, and so on down the line. Under these conditions they faced two alternatives, to close down their factories or reduce wages. And be it said to the honor and good sense of the factory labor element, a large share of them recognized the unwisdom of resisting the cuts which they saw were necessary and in some instances even went so far as to frankly propose a reduction in their wages. With that other and more highly organized form of labor, the railway employees, the willingness to accept a reduction was less apparent and the country trembled for a limited period at the possibility of a strike which would tie up transportation, but happily this was averted and now there is a promise of a reduction in the cost of transportation which will correspond in some degree with the reduction in prices of the articles moved.

With these reductions in the purchasing of wage earners quickly following that of the agricultural element, it is not surprising that the consuming power and willingness to buy of a large proportion of the population has been greatly reduced and that the activities of the manufacturers have thus been curtailed. While the Census Reports on manufactures are only quinquennial and therefore do not register the activities of 1921, it is possible to get a hint of the return by a comparison of the quantities of manufacturing material imported in 1921 when compared with 1919 and 1920. To compare the mere value of manufacturing material imported in 1921 with that of the preceding years would not give a fair estimate of the actual reduction, by reason of the fact that the prices at which these materials were imported have greatly fallen, but when we see that the quantity of raw cotton imported in the nine months of 1921, for which we have available figures, was but 67,000,000 pounds against 269,000,000 in the same months of 1920, we begin to realize the fall off in the activities among the cotton manufacturers. In the other great articles of manufacture for which the United States is depending on other parts of the world, the record was quite similar. Fibers imported in 1921 were only 198,000 tons against 314,000 in the same months of 1920; hides and skin 269,000,000 pounds against 435,000,000 in the same months of 1920, and 530,000,000 in the corresponding months of 1919; india rubber 257,000,000 pounds against 489,000,000 in nine months of 1920; pig tin 34,000,;000 pounds against 104,000,000 in the same months of last year; leaf tobacco 37,000,000 pounds against 69,000,000; and sawed lumber 526,323 M feet against 1,078,319 M feet in the corresponding months of 1920.

When we turn to the exports we find the fall off equally startling, the total for the ten months ending with October having been $3,896,000,000 against $6,831,000,000 in the same months of 1920, this reduction running through all groups, foodstuffs, manufacturing material, and manufactures. But when we find that the average export price of many important articles in the late months of 1921 is but little more than one-half that of one year ago, the causes of the large fall off in total values of exports are apparent. Raw cotton exported in September, according to governmental reports, went at an average of 16c. per pound against 34c. in the same month of last year; wheat $1.34 per bushel against $2.90 in September of last year; corn 60c. per bushel against $1.55 a year ago; bituminous coal $5 per ton against $10 in September of last year; iron and steel billets $30 per ton against $72 a year ago; and pitch pine lumber $32 per M feet against $61 in the same month of last year. This does not mean that the fall in value of exports is entirely due to lower prices, for while there has been an increase in the quantity of cotton and wheat and corn exported and comparatively little reduction in the quantity of meats, the fall in the quantity of certain classes of manufactures, notably automobiles, boots and shoes, certain iron and steel products, leather, and miscellaneous manufactures, has been heavy, but leaving the totals of the present year still far above those of the year preceding the war.

It is not surprising then that with the big reduction in prices of nearly all articles forming the domestic and foreign trade and the disposition of the public to economize, the quantity of money required for the transaction of business shows a marked reduction, the bank clearings of the week ending November 26 having been but $6,114,000,000 against $7,202,000,000 in the same week of 1920, a reduction of 15% in clearings, while the percent of reduction in prices of the articles forming the internal and foreign trade is much greater. Nor is the reduction in the quantity of merchandise being moved as great as the value figures might indicate, since the number of cars loaded in the seven weeks from October 1 to November 12 of the current year totals 6,200,000 against 6,855,000 in the same period of 1920, and 6,450,000 in the corresponding period of 1919.

Even when we contemplate the big fall off in the foreign trade of the country due to lower prices and decreased purchasing power by reason of lower wages, we find that the total value of our exports in the calendar year 1921 will be about $4,550,000,000 against $2,365,000,000 in the year immediately preceding the war, and that the imports of raw manufacturing material will be over $800,000,000 against $633,000,000 in the fiscal year 1911.

Conditions in France of Hopeful Character

By P. RAGUE

Assistant Director, L'Association Nationale D'Expansion Economique, Paris, France

FOR the year, 1920, the foreign trade of France amounted in value to 57,839,708,000 francs, of which 35,404,951,000 francs represented imports and 22,434,757,000 francs exports. For the first eight months of 1921, imports amounted to 13,607,849,000 francs and exports, 14,089,002,000 francs.

The big difference in favor of imports over exports in 1920 was the result of the tremendous need in France for raw materials after the war. Manufacturers, fearing a shortage of materials required in their industries, bought at any price. The year 1921 on the contrary shows an excess of exports over imports, though it also shows a noticeable falling-off in both amounts.

The crisis in exchange, which has made it impossible to buy raw materials, and situation in the domestic market, have greatly reduced imports and have led to the sale abroad of articles which cannot find buyers in France.

After the drop in prices which featured the crisis in the month of May 1921, more steady conditions prevailed up to the beginning of October and it would appear as if there was a tendency towards improvement,—a sign of recovery, slow perhaps but very reassuring. The general trend would be towards stable prices, with a slight tendency towards an increase.

The wave of unemployment which has swept over France has been seriously exaggerated abroad. Figures have been cited, which correspond to periods of strike and not to the general labor situation. The latest official figures show 7000 unemployed, who are being assisted by different organizations. This very small number is explained by the extraordinary effort put forth by manufacturers and merchants in our country to employ their personnel, even without any margin of profit in their business, since they are making for stock. Stocks, after having decreased this summer, have now a tendency to increase owing to the sacrifices made by manufacturers in order to prevent the unemployment of their staffs.

The general financial and industrial situation is good though it appears disturbed owing to treasury difficulties. The larger firms, by wise measures in cutting down useless expenditures and by better organization in regard to their sales abroad, have been able to get through the difficult period. They have found some assistance through the banks and are at the present time endeavoring to organize, in conjunction with them and on an entirely new basis, credits and exportation.

The rate of commercial interest, which went up to more than 10 per cent., has dropped at

Prognostications for the year 1922 cannot the present time (November) to 7 and 7½ per cent.
but be favorable. France, a large producer of metallurgical products, silk and wool, will assuredly find a way to improve her position and will occupy in the different markets of the world the place which her riches and the perseverance of her efforts merit.

The State of Trade in Newfoundland

By E. B. McINERNEY

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TOTAL trade of this Colony for the fiscal year ended June 30, 1921, amounted to $51,350,994, comparing with $75,398,826 for the previous fiscal year. A comparative statement of imports and exports would be as follows:

Our Totai Trade.

	1920-1921	1919-1920
Imports	$28,909,727	$40,533,388
Exports	22,441,267	34,865,438
Total	$51,350,994	$75,398,826

Our Trade with Great Britain

Imports from	$3,230,305	$4,637,071
Exports to	6,275,098	6,411,967
Total	$9,505,103	$11,049,041

Our Trade with Canada.

Imports from	$14,841,561	$18,767,238
Exports to	1,976,032	2,601,859
Total	$16,817,693	$21,369,097

Our Trade with U. S.

Imports from	$9,556,244	$15,411,067
Exports to	1,854,101	4,126,142
Total	$11,410,345	$19,840,209

Our Trade with other Countries.

Imports from	$ 1,281,617	$ 1,715,009
Exports to	12,336,036	21,424,470
Total	$13,617,653	$23,139,479

The following table shows in more detail the total value of the imports and exports of Newfoundland, from and to each country, for the fiscal year ended June 30, 1921:—

United Kingdom	$ 3,230,305	$6,275,098
Canada	18,841,561	1,976,032
British West Indies	794,359	1,131,836
Malta		3,660
India	399	
Strait Settlements	3,887	
Ceylon	149,961	
Argentine Republic		30
Belgium	17,059	1,800
Brazil	2,184	2,263,191
China	5	
Columbia		745
Costa Rica		1,165
Foreign West Indies	2,239	246,376
France	19,424	1,230
Greece	22,106	811,858
Holland	9,303	43,230
Italy	2,649	1,047,321
Japan	20,333	
Africa South		60
Denmark	73	1,080
Peru		56
Germany	9,190	
Austria	230	
Norway	18,044	300
Panama		565
Portugal	105,625	3,781,210
Spain	77,749	2,956,486
St. Pierre	11,675	40,537
Switzerland	9,669	
United States	9,556,244	1,854,101
Sweden	5,451	
Total	$28,909,727	$22,441,267

The value of fishery products shows a decided drop between December 1920 and December 1921, in most kinds of fish, as may be illustrated by the following figures.

	1920	1921
Codfish (large and medium shore) per quintal	$ 10.00	$ 7.00
Codfish (Labrador) per quintal	8.00	4.50
Cod oil, per ton	200.00	85.00
Cod liver oil, per gallon	1.00	.10
Herring (Scotch pack) per bbl	15.00	12.00
Herring (split) per bbl.	4.00	5.00
Salmon, per tierce	20.00	22.00
Lobster, per case	20.00	20.00

As regards wholesale and retail stocks of sundry merchandice, the price tendency is, of course, downward; but, owing to the enormous import duties recently imposed by the Government, which, we would say, average 75%, the decrease in prices of imported commodities has not been as noticeable here as in other countries.

Wage tendencies are also downward, showing a reduction of from 15 to 25 per cent. as compared with a year ago. Considerable employment was provided during the fall, owing to an anxiety to ship fish early. It is estimated that more than half the total catch was exported by mid-November, the bulk of which went over in steamers and the greater part of this season's catch will be disposed of by January 1.

Considerable unemployment resulted from the closing down of the pulp and paper mills at Grand Fall, which formerly, we understand, employed about 1500 men. We believe, however, that it is the intention to operate on a small scale during the winter. The iron mines at Bell Island have been running only part time, which has resulted in considerable unemployment in that locality.

Wholesale stocks of sundry merchandise are decreasing gradually.

Owing to the poor fishing in 1920 and the failure of the sealing industry, the financial situation here, as elsewhere, has not been easy. Interest rates on loans are from six to seven per cent.

We feel that the outlook for 1922 is encouraging, in that the country's products are bringing a fair price, the indications being, as previously pointed out, that stocks will have been disposed of early in the New Year. This should stimulate the demand for next season's fish.

Condition and Prospects of British Trade

By COLONEL O. C. ARMSTRONG, D.S.O.

President of the Federation of British Industries

ALTHOUGH for the second time in succession the New Year will find this country in the paralysing grip of Trade Depression, and in many ways the position to-day is far from reassuring, there are signs that the clouds are lifting.

But this does not mean that we are to expect any sudden return to a revival in trade such as was experienced during the period following the war, but rather that if the united exertions of the country are concentrated on producing the goods for which there still exists a demand in the World's markets, there should be a gradual and steady recovery to a state of "normal" as opposed to "boom" activity.

In saying this, however, I should like to make it clear that it is not my intention to countenance the easy optimism which has made some speakers and writers on the trade position encourage the people of this country to expect British trade and commerce to return like "manna" from Heaven, or that panaceas or other quack remedies will enable us to achieve it, but only that there are markets in the World which are prepared to take our goods if we are prepared to supply them at the prices which the customers in these markets are able to pay.

The distant markets of the Far East, South America, and the British Dominions are full of possibilities if they are properly explored and developed, and until those of our pre-war markets which have been disorganised are restored, there is little doubt it is to these vast areas of the world that we must direct our energies.

It should not be forgotten that the present trade slump actually started in the East in Japan; it reached the Continent of Europe by way of the United States and England, paralysing in turn each market as it arrived. The Far Eastern markets closed to British traders one after the other. In Japan, the financial crisis stopped buying and at one time seriously menaced the commercial stability of that country. The Indian market has been stagnant owing to the difficulties of the rupee combined with the political situation. The Chinese market has been depressed by the fall in the price of silver and the breakdown in the internal administration of that country. The British Dominions, especially Australia and South Africa, were all beset with internal financial troubles. In South America the miscalculation of the demand resulted in an enormous over-stocking of that market.

In the same way as the depression came from the East, I feel that it is to the East that we must look for recovery. There are grounds for hoping that the Far East is once more finding its feet. The gradual stabilisation of post-war conditions which has been going on during the past three years is bearing fruit, and the financial difficulties in which China, Japan, India and the Dominions found themselves are gradually becoming adjusted.

Reviewing the position in the markets nearer home—those of Germany, France, Spain, Central Europe and the Near East—the path of the trader is still beset with almost insuperable obstacles. It is unreasonable to expect that these can be removed either easily or rapidly. The currencies of almost all the European nations are constantly subject to governmental manipulation, with the result that exchanges are still in a state of violent fluctuation, rendering any attempt at trade a financial nightmare.

In any case, I am of the opinion, in view of the present abnormal conditions, that

there has been an inclination to lay too much emphasis on the importance of these European markets as a factor in any trade revival.

Public attention has been largely directed towards the Continental markets and in this way their value to the British manufacturer is in danger of being exaggerated. The springs of demand in the immediate future appear to me, as I have already said, to lie further away from Europe. The teeming millions of China and India, the rich markets of the Dutch East Indies, and the undeveloped wealth of the British Dominions overseas—in these lie the hope for the future prosperity and development of British trade. It is my belief that in many continental countries the high-water mark has been reached with regard to tariffs, and that we can therefore look forward to some reduction in the not too distant future.

Similarly, the menace of foreign competition has been exaggerated, and there is reason to believe that the strength of competition to be expected from Germany in the near future has been greatly over-estimated. It is true that at the present moment we cannot compete with Germany as to price, but it is as well to remember that she is only able to undersell us owing to the inflation of her currency, by which policy she is in effect subsidizing her manufacturers at the expense of the remainder of the German nation.

This state of affairs can necessarily only be temporary and already there are indications that it is coming to an end. At the same time it should not be forgotten that (putting all question of currency depreciation on one side) we must be prepared to face and compete with the "real" costs of production of our continental rivals. The nation which produces her goods most cheaply will have the greatest chance of success in the world race for trade, both in the old and new markets.

Unfortunately, the British manufacturer is heavily handicapped for the race. Industry still groans under an intolerable burden of taxation and, owing to the working of the three years' average, the coming year may well see income-tax in many cases paid at the rate of over 20s. in the pound. Direct taxation upon industry still remains.

The financial policy of the Government, bound as it is to the recommendations of the Cunliffe Committee, constitututes an additional handicap. It is true that up to the present no very definite steps have been taken towards deflation. But the threat was sufficient. Any proposal on the part of the banks to restrict credit alarms holders of commodities, while buyers hope that prices are going to fall. Consumers cease buying and holders rush to sell. Consequently new orders are checked and production and employment fall off.

In this connection I should like to refer to the recent reduction of the Bank Rate to 5%. When the first change took place this year, at the end of April, from 7 to 6½% it raised strong hopes that before many months were over we should see the official minimum for discounts down to the 5½% level. Unfortunately the scaling down process has been much slower than money conditions would appear to have warranted. We find, for example, that while traders recently have had to pay 5½% or more on their loans, such was the amount of money available in the market that it was sometimes hard to find employment for it even at nominal terms.

But although it has been long in coming, the recent fall is none the less welcome. It will lessen interest payable on loans, enable owners of industrial concerns and other borrowers to make new issues on less onerous terms, and, by effecting the automatic reduction in deposit rates should force money into the market for investment.

The following table gives the details of money and discount rates at the end of last year, also on June 30th and October. 31st this year:—

	Dec. 31 1920	June 30 1921	Oct. 31 1921
	%	%	%
Bank Rate	7	6	5½
Bank deposit rates	5	4	3½
Three months bills	6⅝	5¼	3¾
Day to day money	3.5	4½–6	1½–4
Brokers' at call	5	4	3½

Since the bank rate was reduced recently to 5 per cent. the other rates quoted in the table have been lowered as well; bank deposit rates to 3 per cent and three months' bills to 3¾—3⅞. Day to day loans are arranged at 2½ to 3 per cent, and brokers' "at call" money is quoted at the round figure of 3 per cent.

There remains to be considered what is probably the most encouraging sign of all. There has been an increasing readiness on the part of the working classes of this country to realise that they must be prepared to accept the reduction of wages necessary to enable goods to be sold at prices which the markets of the World are able to pay. In nearly every industry not only have substantial reductions taken place, but there are signs that this has been accompanied by increased output.

I believe that as soon as we witness a revival of confidence in one country, then others will follow suit, and a general revival will take place in the World's trade.

Internal Conditions in France Favorable

BY EDWARD POPE
Assistant Manager, Bank of Montreal (France), Paris

FRANCE'S foreign trade during the first nine months of 1921, according to the valuation of the Valuation Commission for 1919, is as follows:—

	1921	1920
	Fr. (1.000.)	
IMPORTS		
Foodstuffs	4,170,124	9,290,798
Materials for industry	7,903,907	18,866,432
Manufactured goods	3,759,497	9,856,790
Total	15,833,528	38,014,020
EXPORTS		
Foodstuffs	1,383,157	1,802,249
Materials for industry	4,047,880	4,512,028
Manufactured goods	9,581,940	12,556,650
Postal Packets	849,678	776,868
Total	15,862,655	19,647,795

During September imports appreciably increased while exports remained nearly stationary. The excess of exports over imports is reduced to Fr. 23 mill, for the nine months, from Fr. 480 mill. for eight months. The increase in imports is chiefly to be found in raw materials, which in September were valued at Fr. 1.200 mill. against a monthly average of Fr. 800 mill. for the eight preceding months. In weight, imports for September amounted to 3 mill. t. against an average of 2 mill. t. for the preceding months. This is a favorable sign as it indicates a revival of business. Compared with pre-war trade, imports have declined 25% and exports 30%. while of course, prices are much higher (Journal des Debats, Sept. 20; Information, Sept. 22).

The prices of commodities showed a downward tendency from a high level in January, February and March of this year, particularly as regards items such as coal, clothing, boots and shoes. This downward tendency did not appreciate to any extent and appears to have been checked. Certain articles again show an upward tendency. Owing to various conditions resulting from the long drawn out drought of last summer higher prices for food are looked for this winter and no decrease is anticipated until next summer at the earliest.

During the past six months efforts have been made by many employers to reduce wages, but this has immediately led to strikes and there has been little downward revision of wages on the whole. The tendency may be said to be downward although there has been no decided movement in that direction.

The unemployment situation in France is stated to be better than in most countries, but while the situation is present, the French are successful in coping with it. It is difficult to ascertain the actual number unemployed, but on account of the vast amount of work which has been undertaken in the devastated regions and the general desire of the people of this country to work, it may be safely stated that the number of unemployed is steadily being reduced.

It is difficult to obtain any direct information regarding stocks of goods. The wholesale stocks held are said to be large, but the period of non-buying on the part of the public seems to be approaching an end, and the present demand for goods will, it is hoped soon approach the normal.

The financial affairs of France are much involved, but the heads of the Government, notwithstanding doubts of the continuance of German reparation payments, continue to be optimistic.

The following are the figures recently presented by the Minister of Finance for the Budget of 1922:—

	Francs.
Ordinary expenditure	21,753,000,000
Extraordinary expenditure	3,200,000,000
Frs.	24,953,000,000
Revenue from ordinary Resources	19,778,000,000
Exceptional revenue	3,550,000,000
Frs.	23,328,000,000

thereby indicating a deficit of Fcs. 1,600,000,000, exclusive of the supplementary credits that will have to be voted, if the additional allowances of Fcs. 700,000,000 granted to public officials in recognition of the high cost of living (which was suppressed in principle as from December 31, 1921) is to be continued, as the Finance Minister proposes.

The difference, it is said, will be met by issuing treasury bonds. It is estimated that the amount of bonds in circulation at the end of the present year will be between 68,000,000,000 francs and 70,000,000,000 francs.

Mr. Bokanowski, the author of the report foreshadowed the eventual abolition of some of the State monopolies, which he says could be better worked by private enterprise, with greater profit to the State.

The Bank of France discount rate was reduced within the past few weeks from 6% to 5½%. The rate for advances on public securities is at present 6½%.

The general outlook for 1922 is much clouded by the uncertainty of German action in regard to the carrying out of indemnity obligations. From an internal point of view, however, the condition of France would seem to be favorable. The willingness of the French to work and the relative unimportance of the unemployment problem in this country, together with the economical qualities of the peasantry, all tend to inspire confidence in the ultimate recovery of France.

Venezula Looks to its Crops

BY W. BURNS

Manager, The Royal Bank of Canada, Caracas, Venezuela

AT the present moment imports are rather limited owing to the general situation and the fact that stocks were excessive. However, stocks are gradually decreasing and in some lines are getting low. In dry goods they are still much too heavy and prices have been demoralized. Prices generally appear to have a downward tendency.

Some articles, which might possibly be imported from Canada, if prices were right, are,—paper, hardware, cast iron piping galvanized, galvanized iron both in plain sheets and corrugated, bath room supplies, pumps, plows, agricultural implements, aluminum kitchen utensils, enamelware, electric cooking utensils, electric bells, electric lamps, etc., and probably among the most important, flour and groceries.

Following are the imports for the year July 1, 1919—June 30, 1920.

Colombia	$ 15,257.53
Cuba	16,672.62
Curacao	171,675.12
Denmark	50,234.75
England and Colonies	13,314,773.30
France	2,591,767.51
Germany	449,214.06
Holland	1,081,077.69
Italy	1,071,847.74
Japan	24,416.69
Panama	350,077.39
Porto Rico	89,049.21
Spain	2,162,045.53
Trinidad	885,053.73
United States	32,839,576.35
Others	42,631.93
	$55,185,371.18

Exports for the same period were as follows.—

Belgium	$ 29,821.20
Canary Islands	140,022.20
Cayenne	75,738.60
Cuba	466,002.80
Curacao	3,843,365.11
Colombia	294,612.20
Denmark	11,364.35
England and Colonies	3,340,525.61
France	5,151,820.60
French Colonies	165,317.21
Germany	66,129.51
Holland	2,079,141.56
Italy	365,802.00
Porto Rico	32,564.16
Spain	3,812,663.81
Trinidad	2,426,403.91
United States	22,385,274.35
Others	85,609.10
	$45,072,208.40

Principal exports were balata, $1,795,718; cocoa, $9,290,836; coffee, $20,344,743; hides, skins and leather, $4,672,862; sugar, $2,120,-724.

Business at present (November 17) is very quiet as it is between seasons. However, during the first months of the year we expect to see considerable activity owing to exports of coffee and cocoa. The crop of the former is fair-sized and the latter promises to be even larger than the average. Two other important exports of Venezuela, hides and cattle, are in rather a depressed condition at present owing to lack of market.

All wages have a downward tendency, though there is not an oversupply of labor and little unemployment, other than clerks. Collections are slow, especially in the interior, but the larger Venezuelan merchants have a good name in regard to meeting their obligations.

Interest rates are 9 per cent. for short term advances and 10 per cent. for advances in current account, while merchants generally charge their clients 12 per cent.

In order to promote trade between Canada and Venezuela it is essential that arrangements be made for steamers sailing from Canada to touch at a Venezuelan port regularly, say once or twice a month. A considerable market could thus be found, almost at once, for such articles as flour, cement, canned goods, etc.

The Bahamas

BY G. A. PAMBLIN

Manager, The Royal Bank of Canada, Nassau, N.P.

FIGURES for imports and exports have been prepared for nine months of 1921 only. When compared with the same period of 1920, imports show a decrease of £72,357 and exports an increase of £108,017. The Comptroller of Customs is of the opinion that, during the last three months of the year, imports and exports will probably balance each other.

Commodity price tendencies are fairly steady, although there has been a depreciable decline in the prices of certain lines during the last four months, (July-October).

Although the cost of living may be said to be declining, the price of wages has not fallen, more particularly among skilled laborers. It would appear, however, that those acquainted with the situation are anticipating a slight reduction in the New Year.

A certain amount of unemployment exists, owing to the stagnant condition of the sponge and sisal industries, many of the workers having been compelled to turn to other means of livelihood.

Wholesale stocks are decreasing, it having been felt that the carrying of large stocks is unwise, because of the liability of prices to change at short notice.

The financial situation is sound, the Government being in receipt of revenue exceeding expenditure and the rate of interest averaging about 6 per cent. for loans.

We regard the outlook for 1922 as encouraging. A contract will be completed with the Munson Line for a schedule service and with the advent of large numbers of tourists, who come to this climate to escape the cold of the north, there should be a decided improvement in business generally.

Barbados

BY SPECIAL CORRESPONDENT

Bridgetown, Barbados

TRADE statistics for 1921 are not yet available. For 1920, imports were valued at $21,698,577 and exports at $17,088,103. These figures compare with imports of $18,688,598 and exports of $10,-535,582 for 1919 and imports of $14,332,828 and exports of $7,854,250 for 1918.

The yield of sugar for the year 1920-21 amounted to 22, 714 tons and of syrup, 33,274 puncheons, the net result being as near as possible, 33,800 tons. These figures are compiled from statements furnished by the official weigher and gauger of the Island and are substantially correct.

Commodity price tendencies show a decided downward tendency but, as New York and Canadian exchange still continues somewhat high (Nov. 29), goods from these countries remain at far above pre-war prices.

Wage tendencies are downward and, owing to the failure of last year's crop, planters are not only keeping wages down but are undertaking only such work as is absolutely necessary for upkeep of their plantations.

We are not greatly affected by the unemployment problem here. The average West Indian negro is able to live on a very small sum per diem and takes care to do no more work than is absolutely necessary to maintain him in food and scanty clothing.

Wholesale stocks of every description are on the decrease, merchants doing business on a "hand to mouth" basis only.

The financial situation at the present time is very much strained, the legal rate of interest for loans being only 6 per cent.

The outlook for 1922 at present is not bright. There are two factors responsible for this,—the fall in the price of sugar and poor rainfall during the last few months. Given ideal weather conditions between now and reaping time in February and considerable improvement in the crops will be shown; otherwise, we fear the year 1922 will be no better than 1921.

Spain

BY N. G. HART

Manager, The Royal Bank of Canada, Barcelona

DURING the past year imports have been well maintained, although a very large part of them are coming from Germany due to the low value of the mark. The United States dollar in Spain has been on an average premium of over 40 per cent., which has greatly curtailed imports from that country. Trade with England has also suffered for the same reason, although the premium on the pound sterling is much less pronounced. Custom duties were heavily increased during the year and all duties are now payable on a gold basis. Exports have been much less than the previous year, due presumably to the general conditions prevailing and lack of demand abroad.

IMPORTS
1st Seven Months

	1920	1921
Live Cattle	$ 7,674,975	$ 2,100,025
Raw Materials	222,230,018	232,189,170
M'fd Articles	362,970,578	376,642,126
Food Products	193,875,274	220,269,896
	$786,750,845	$831,201,217
Gold	$ 4,897,600	$ 111,160
Silver	830,260	379,691
	$792,178,705	$831,692,068

EXPORTS
1st Seven Months

	1920	1921
Live Cattle	$ 795,123	$ 1,056,992
Raw Materials	133,152,663	83,577,013
Mf'd. Articles	191,121,007	124,921,789
Food Products	282,998,226	191,270,037
	$608,367,019	$100,825,831
Gold	$ 3,350,880	$ 2,975,100
Silver	3,725,845	6,051,503
	$615,143,744	$109,852,734

For the three years, 1918, 1919 and 1920 imports and exports compared as follows:—

	IMPORTS	EXPORTS
1918	$ 623,887,092	$1,009,223,087
1919	1,084,278,080	1,311,211,924
1920	1,443,862,219	1,021,867,271

There has been very little change in commodity price tendencies and the same applies to wage tendencies. The cost of living has not decreased. There is considerable unemployment but the situation is not serious. Wholesale stocks are deteriorating. The financial situation is fair, the average rate for commercial loan being 7 per cent. I do not look for any special changes in general conditions in the near future.

Trinidad

By J. B. CONNEL

Manager, The Royal Bank of Canada, Port of Spain, Trinidad

DURING the last two years, these islands, in common with the rest of the world, have been passing through a period of acute financial depression. The sharp reduction in the price of sugar, cocoa and other products, in which they are vitally interested, has brought about a situation which has in many cases been difficult to meet and there have been a number of failures. Prices of dry goods and other commodities have declined in accordance with the large reductions of values abroad but we believe the decline has not corresponded with the decrease in foreign values. However, the situation has been met in a very cheerful manner and we believe that, should there be an improvement in the price of produce, there is no reason why we should not look forward with confidence to the future.

Uruguay

By W. A. MOSHER

pro Manager, The Royal Bank of Canada, Montevideo

DURING the year under review, October 1st. 1920 to September 30th., 1921, which is considered here as the "produce year," the most noticeable feature has been the great drop in the prices of wool and hides. This accounts for the falling off in the value of produce exported, for the volume has been quite equal to that of previous years.

The last three months have shown a decided falling off in imports owing to the existing stocks of merchandise being ample for the country's requirements as also to the unfavorable state of the exchange market, our "peso" being heavily depreciated with regard to American dollars, pounds sterling, pesetas, etc., though at a premium as regards francs, lires, marks, etc. Imports and exports for the 12 months ending September 30th., last as compared with the same period in the preceding 12 months, were:—

	1920	1921
Imports	$ 80,106,817	$65,377,432
Exports	$102,217,456	$78,592,552

The prices of commodities show a slight downward tendency but so long as the present situation in exchange exists this cannot be accentuated as goods cannot be imported cheaply to replace those sold.

In wages, the tendency is to maintain present levels and as the cost of living shows no signs of coming down, there is no prospect of a reduction in wages. There is not much unemployment here at present.

Wholesale stocks are decreasing and as throughout the camp stocks are very low and importation small, these should continue to decrease.

The general financial situation may be described as fair. There is abundance of money and loans are made at from 7½% to 8½%.

It is somewhat difficult to forecast the situation in 1922. The crop prospects are good and prices remunerative, but the production of grains in this country is small, generally only about sufficient for our own wants, however, it is expected that this year there will be a small surplus for export.

As regards our staple industry which is cattle raising, a great deal will depend on the future course of the beef market and if there is even a moderate demand from Europe, conditions will improve, for there are large quantities of cattle available for slaughter and camps are for the most part in fine condition. Hides and wool are in good demand and prices remunerative.

Jamaica

By SPECIAL CORRESPONDENT

THE collapse in the sugar market has naturally affected Jamaica business to a great extent, and to this unfortunate feature must be added the difficulties attendant upon the world situation, which has caused a drop in value on all commodities. Many sugar planters and manufacturers are in a difficult position owing to the fact that they made large additions to plant, etc., in 1920 in anticipation of continued good markets. Unfortunately the sugar situation was further aggravated by droughts which prevailed in that year and by floods during the recent crop taking-off period. It became very difficult for planters to secure advances to carry on cultivation and accordingly the Government arranged to loan £400,000 to the sugar industry, repayable after next crop. It is not therefore easy to make any forecast with regard to 1922 outlook pending the result of next year's grinding operations. It may, however, be mentioned that the Island was fortunate in escaping a hurricane last year, and as a consequence the banana industry has in many ways saved the situation, since ruling prices for this fruit have been very good. Many sugar planters are now considering putting some acreage into bananas and, if weather conditions in 1922 are propitious and demand remains high, the relative results will alleviate financial difficulty which may arise through poor markets for other products. Meantime the Island is in a waiting position.

It must be strongly emphasized that collection in the Island are, speaking generally, good, and the Jamaica importer has shown himself to be of the highest character with regard to the matter of meeting obligations.

The foreign trade situation may be thus summarized.—

IMPORTS

From	1920	1919
United Kingdom	£3,063,986	£1,012,576
United States	6,040,607	3,365,274
Canada	896,916	530,108
Other Countries	311,773	177,657
	£10,313,282	£5,085,615

Imports for half-year, ending June 30, 1921, amounted to £1,524,290, as against £1,736,586 for same period of 1920.

EXPORTS

To	1920	1919
United Kingdom	£3,049,080	£3,567,103
United States	2,015,245	1,342,776
Canada	1,563,298	388,677
Other Countries	518,387	328,772
	£7,146,010	£5,627,328

General exports for half-year ending June 30, 1921, amounted to £1,514,208 as against £4,698,000 for same period of 1920.

Sugar and rum to the value of £1,389,000 were exported to Canada during 1920 out of a total export value for these products of £3,282,000. In 1920, Jamaica had a unfavorable trade balance of £3,000,000. For the first half of 1921, on the other hand exports and imports were practically equal.

Tendencies in commodity prices and in wages are both downward.

INDUSTRIAL DEVELOPMENTS OF 1921 ILLUSTRATED



Gary Motor Truck Corporation of Canada, Limited

During the year this Company purchased the plant formerly operated by the Chase Tractor Company on Atlantic Avenue, Toronto. This plant, illustrated above, contains 75,000 square feet of floor space and is admirably suited to the Company's purposes. All of the Company's export business will be handled in future by the Toronto plant. Besides trucks, fire apparatus, street flushers and similar appliances will be manufactured.

News and Views of the Association

There will be found each month in this department a record of the various activities of the Canadian Manufacturers Association during the preceding month. The information is supplied to INDUSTRIAL CANADA officially, and all members of the Association are urged to acquire the habit of reading and checking over the contents of the department carefully in order to keep themselves posted on the work of the Association

December Meeting of the Executive Council

ONE of the best attended and most interesting meetings of the Executive Council held during the past year was that convened at the head office on Thursday, December 15th. John R. Shaw, first vice-president, presided, and on opening the proceedings, called to the front, J. H. Fortier, Quebec, chairman of the Quebec Division; Joseph Picard, Quebec, chairman of the Tariff Committee and Senator Beaubien, Montreal. Later, ex-president Col. Thomas Cantley, New Glasgow, was invited to occupy a seat beside the presiding officer.

Members of Council present at the meeting were:—

Anthes, L. L., Toronto
Beaubien, The Hon. C. P., Montreal
Birge, Cyrus A., Hamilton
Breyfogle, W. R., Peterborough
Cantley, Thos., New Glasgow, N.S.
Coulter, W. C., Toronto
Davis, The Hon. E. J., Newmarket
Douglas, G. H., Hamilton
Ellis, Jno. F., Toronto
Freyseng, Ed. J., Toronto
Gartshore, W. M., London
Hollinrake, T. A., Toronto
Joubert, P. E., Montreal
Lowndes, C. B., Toronto
Macfarlane, G. W., Toronto
Marsh, W. H., Hamilton
Meldrum, M. R., Niagara Falls
Murray, Jas. P., Toronto
Neighorn, A., Montreal
Parsons, S. R., Toronto
Picard, Jos., Quebec
Roden, Thomas, Toronto
Shapley, W. H., Toronto
Shaw, J. R., Woodstock
Snyder, H. M., Waterloo
Storey, J. T., Brockville
Taylor, John. M., Guelph
Thorn, J. O., Toronto
Waterous, C. H., Brantford
Watts, Geo. W., Toronto
Whittal, Fred., Montreal
Williams, S. J., Toronto

The agenda called for the presentation of reports from the Executive, Tariff, Transportation, Commercial Intelligence, Insurance, Membership and Legislation Committees, all of which were received with much interest. Senator Beaubien was requested to lay before the meeting information about the proposed Made-in-Canada train for France, which he did in an eloquent and convincing manner. Another feature of the meeting was a discussion of the proposed visit of manufacturers to the British West Indies, which was participated in by Col. Cantley and S. J. Williams, who expressed a strong desire for action in this direction.

A silent standing vote was taken on a resolution directing the Secretary to prepare a suitable message of sympathy to the relatives of the late John McClary, Robert McLaughlin and Hedley Shaw, three outstanding captains of industry, whose lives had been an example to their fellow Canadians. The resolution was proposed by Hon. E. J. Davis, and seconded by Col. Cantley, both of whom spoke in highly appreciative terms of the worth of the three deceased manufacturers. Col. W. M. Gartshore of London, who was present, responded on behalf of the family of the late John McClary.

Annual Meeting Plans Being Arranged

At December meeting of Council, the Executive Committee reported as follows with regard to plans for the 1922 Annual Meeting—"The Association has not held an annual meeting in the Maritime Provinces since 1913. Your Committee therefore feel that the annual meeting for 1922 be held in the Maritime Provinces, preferably St. Andrews-by-the-Sea. After conference with the Executive of the Maritime Division a definite recommendation will be made to the next meeting of Council."

Entertainment of the Japanese Mission

The Department of Trade and Commerce, Ottawa, asked the Association to assist in entertaining members of the Japanese Mission who were visiting the United States and Europe. Following instructions given at the last meeting, the Association notified the Department of Trade and Commerce that the Association would be glad to do everything possible to assist. The plans of the Japanese Mission however, were changed so as to prevent their visiting Canada.

Work of the Membership Committee

The Membership Committee, reporting to the December meeting of the Executive Council, stated that they were having a struggle to prevent a net loss in membership this year. This was due to three causes.—

1. Trade conditions make firms unwilling to incur even so small an extra expenditure as a membership fee.

2. An unusual number of firms have gone out of business or have amalgamated with other firms.

3. The increase in fees authorized by the annual meeting this year, while necessary, does not make it easier, under present conditions, to secure new members.

The summary of applications and resignations received by Divisions for the first eight months of the current fiscal year are as follows:—

	Applications	Resignations	Gain	Loss
Ontario	125	119	6	
Quebec	27	55		28
Prairie	66	37	29	
British Columbia	24	23	1	
Maritime	11	18		7
	253	252		

Net increase 1

253 new members secured during the eight months makes a satisfactory showing, it is submitted, under present conditions. The resignations, however, have neutralized our efforts. An analysis of the causes of the resignations follows:—

Out of business	103
Struck off for non-payment of fees	49
Amalgamation	21
Dropped manufacturing end of the business	27
Other causes	52

It will thus be seen that of the 252 resignations, those in the first four classes numbering 200, were resignations which could not be prevented, and were largely due to poor trade conditions. No resignations have been received during the eight months owing to dissatisfaction with the Association's policies or services.

Made-in-Canada Train For France

At the December meeting of the Executive Council, the Commercial Intelligence Committee presented a report outlining action taken with regard to the proposal to send a train of Canadian exhibits to France. The report said in part:—

"As no decision on this subject was made by the Council at its last meeting, after consultation with the general officers of the Association, two circulars were sent to the members outlining in full the proposal to send a representative train to France. One hundred and forty-four replies were received, the majority approving the principle."

"In conformity with the replies to the circulars and retaining the principles outlined by the Commercial Intelligence Committee, the following letter was written over the signature of the General Manager to the then acting Prime Minister, the Hon. Sir James Lougheed:—

"In answer to the letter of Sir Geo. Foster, dated September 10th, headed "Franco-Canadian Sample Train," I may say that the matter has been given careful consideration by our interested members.

"The majority of the members heard from thoroughly endorse the principle of the proposal to send a train thoroughly representative of Canadian resources and products.

"Provided the Government will take hold of the project and make it a national venture, assuming the cost of management and arrangement of exhibits, in view of this expression from its members, the Association has great pleasure in offering its hearty co-operation in advancing the interests of the project.

"No reply has yet been received from the Government, but it was felt that the Executive Council would be interested in hearing just where the question now stands."

Following the reading and adoption of the report, Senator C. P. Beaubien, who has been the prime mover in the proposal, was called upon to furnish more detailed information. This he did eloquently and convincingly. He referred to the fact that the idea had been first suggested in 1916; that, at that time, it had met with approval; but that conditions

had made it impossible to carry out such an undertaking. He contended that, if the idea had been found good then, it was still better now. The French train had come to Canada and had traversed the Dominion and Canada could quite consistently ask for and secure a reciprocation.

As to the criticism that France was discriminating against Canada in tariff matters, Senator Beaubien found no valid obstacle in this. It was not for Canada to take the attitude that she would not do this or that until the obstacles complained of were removed. France was already in Canada's debt to the extent of what Canada had done in connection with the French train and it was for Canada to take prompt advantage of this debt. Further, he was convinced that it only needed suitable representations to the French Government to obtain the removal of the tariff discrimination.

Senator Beaubien told of the plans for handling the train in France and the subsequent display of the exhibits in a magnificent building in Paris, situated where thousands of people would pass daily. He told of the receptive mood of the French people and their enthusiasm for Canada and Canadians. He explained that not only would the exhibits lead to trade openings but that, as a result of displaying Canada's resources and products, immigrants would be attracted. In a word, he painted such a glowing picture of the possibilities of the project that not a dissenting voice was heard when a resolution was passed arranging for a deputation to call on the new government and urge it to take up the scheme.

Legislation Committee deals With Blue Sky Law

Pursuant to report by the Legislation Committee to the meeting of the Executive Council held on Oct. 27th, an interim report on the proposed Blue Sky Act of the Province of Ontario made by Mr. A. H. O'Brien to the Hon. W. E. Raney, Attorney General, has been published, setting out the chief difficulties intended to be solved as follows:—

(1) To frame a law which will check speculative and fraudulent companies and yet not hinder legitimate business.

(2) To meet the claim of the mining interests that such a law will retard the development of the Northern mining district.

(3) That notwithstanding any law, the Province will be invaded by letters and circulars of such companies sent by mail, and by newspapers containing their advertisements.

(4) The question of registering and granting certificates to companies.

(5) The licensing of agents.

(6) What kind of securities should be exempt from the Act.

Upon the desirability or otherwise of introducing Blue Sky legislation in the Province of Ontario, the report states that the preponderance of present opinion appears to be largely in favor of the enactment of some species of Blue Sky legislation and that the choice seems to be between what is commonly termed a "Fraud Act" (adopted in three of the States of the Union) and the usual type of Blue Sky legislation (which has been adopted in some 40 States and in three Provinces of Canada).

In Canada, the three Provinces which have passed Blue Sky legislation are: Manitoba, Saskatchewan and Alberta. The general result is stated to be satisfactory subject to difficulties met, which it is hoped to remedy by legislation. The Fraud Acts mentioned as being adopted in three States (Maryland, New York, and New Jersey) provide in short, that when it is reported to the Attorney-General that any fraud or false pretence is being employed in the issue or sale of any stock, the Attorney-General may investigate and enjoin the person or Company. The objection to this form of legislation is that by the time the machinery of the law is enforced, most of the harm has been done and as a matter of fact, in one of the States, which they quote (Maryland) the Attorney General states that it is too soon to test the efficiency of the law, but that in its present form, it is probably inadequate to accomplish substantial results. In the United States, in addition to the mining interests, the chief opposition to the usual form of Blue Sky legislation appears to come from the Investment Bankers Association of America, a very important and far-reaching Association. Originally, this Association is said to have been in favor of Blue Sky legislation, but has now changed its opinion to one favoring the fraud legislation, above outlined, on the other hand, it is stated that the States to the South and also the three Western Provinces of Canada which have adopted this form of legislation, express satisfaction so far with their experience.

The Legislation Committee has already given considerable attention to the subject and on 29th January 1920, Mr. Thos. Mulvey, K.C., Under Secretary of State, at the request of Toronto Branch, addressed a public meeting of the manufacturers on the subject in the Toronto Board of Trade Club. In the course of this address, Mr. Mulvey stated strong objections to such legislation, and recommended that we should go to England, where financial operations are carried on to a greater extent, rather than to one of the Western States for a precedent.

The Legislation Committee had in view that to make such investigation into the position of every new Company, complete or effectual, would demand a very numerous staff of trained officers and lead to great delay and expense, while an incomplete or perfunctory investigation would be worse than none. It would be an attempt to throw what ought to be the responsibility of the individual on the shoulders of the State, and would give a fictitious and unreal sense of security to the investor, and might also lead to grave abuses.

The Legislation Committee are of opinion that before launching into this new field of legislation, the existing types of legislation should be examined from a practical standpoint, and an opinion obtained from the various business interests on the subject. A Blue Sky Law would, of course, restrain the floating of many fraudulent schemes, but if granted government license worthless shares might be sold more readily, which constitutes one of the dangers of the Blue Sky Law, as a government permit to sell might be regarded as a government certificate of its merit.

Your Legislation Committee will carefully watch the progress of events and will take the necessary steps to co-operate with other business interests in the matter.

January Meeting of Council at Hamilton

The January meeting of the Executive Council will be held at the Royal Connaught Hotel, Hamilton, on Thursday, January 19. It will be preceded by the usual meeting of the Executive Committee, called for 10 a. m.

Arrangements have been completed for the operation of a special train from Toronto to Hamilton to accommodate the large number of Toronto and Eastern Ontario and Quebec manufacturers, who are expected to attend this meeting. The train will leave the Union Station, Toronto, at 11 a.m., and will leave Hamilton for the return trip at the conclusion of the proceedings in the afternoon.

At 12.30 the Ontario Division will hold a luncheon, after which Mr. S. R. Parsons, Toronto, ex-president of the Association, who represented the employers of Canada at the recent International Labor Conference at Geneva, will give a report on the work of the Conference. It will be recalled that Mr. Parsons was one of the representatives chosen by the Association to attend the National Labor Conference at Ottawa in September, 1919. He was then appointed by the Government of Canada to represent employers of Canada at the International Labor Conference in Washington in October, 1919. He has therefore had an unusually broad experience in studying current labor problems and his address, which will include his impressions of labor and trade conditions in Europe as well as international labor questions, will be most interesting and instructive.

A large attendance of Ontario members is urged both for the luncheon and the Executive Council meeting. Several matters of importance are to be brought before Council at this meeting.

Recent Publications

333, November 29, 1921.—Circular to members issued by the Transportation Department, containing copy of the order of the Board of Railway Commissioners reducing freight rates.

334, December 28, 1921—Circular to members issued by the Tariff Department, urging members to take action to prevent the repeal of legislation providing safeguards against dumping of goods into Canada.

335, December 20, 1921—Circular to members issued by the Tariff Department explaining changes in regulations connected with the new Marking Act.

Toronto Export Club Meets in Hamilton

The Canadian Export Club of Toronto assembled in Hamilton for their meeting on December 13th and 55 members were present as well as two visitors, M. P. Kaffin and S. R. Findley, Auckland, New Zealand. Letters were read from G. T. Towers, superintendent, Foreign Trade Department Royal Bank of Canada, regarding "to order" shipments to Venezuela and Colombia, and from E. W. Sours, general manager for R. G. Dun and Company for the Republic of Mexico. Mr. Sours said that he would be glad to assist the Club in any way within his power, and sent pamphlets and bulletins on Mexican trade conditions which have been placed in the Club's files.

A. Tucker of Dale and Company delivered an interesting address on "Marine Insurance, its Growth and Development in Relation to Canadian Foreign Trade." He traced the origin of the marine insurance business in London in the seventeenth century, the development and romance of Lloyds and the various difficulties encountered during the war. Referring to Canadian foreign trade, the speaker touched on some of its picturesque features, such as the trade carried on by the Nova Scotia schooners all over the world, and peculiar customs still in vogue with regard to the insurance of the catch of Canadian sealing fleets. The main part of the address was devoted to present problems in connection with marine insurance, including pilferage and theft. A full report of this address is published on another page of this issue.

H. J. Waddie, Canadian Drawn Steel Company, Limited, Hamilton, showed some lantern slides illustrating conditions in the West Indies which affected trade there. He also discussed various features relating to trade between Canada and the Islands.

News of the Month from Maritime Division

Headquarters of Division—Amherst, Nova Scotia

Chairman.....L. W. Simms, T. S. Simms & Co., Ltd., St. John, N.B.
Vice-Chairmen.....C. S. Sutherland, Amherst Boot and Shoe Co., Ltd., Amherst.
J. A. Marven, J. A. Marven, Limited, Moncton, N.B.
J. E. McLurg, Halifax Shipyards, Limited, Halifax, N.S.
Secretary.....H. R. Thompson, Box 470, Amherst, N.S.

WITH the coming of the new year, it is natural for us to be retrospective. This year, however, reminiscencing should not be indulged in too freely, except in the light of benefitting by past experiences, inasmuch as the perspective would not be particularly bright, owing to the general business depression which obtained throughout the year.

Owing to the great diversity of industry in the Maritimes, we, as a rule, do not experience the violent fluctuations which, perhaps, occur in other parts of the globe, and largely due to the industrial conditions depending upon one or two basic industries. It is most unusual for the agricultural, lumber, fish, coal, and steel industries to experience a severe depression at the same time; yet the latter four, in the Maritimes, have been passing through what perhaps has been the greatest depression experienced for many years. The agricultural industry is now suffering from a slump in market prices, which makes the immediate prospects appear none too bright for those engaged in this occupation.

We would be most pessimistic, however, if we would let ourselves think that these conditions could prevail for any great length of time. Even now, we see bright spots on the horizon. The markets for cured fish have improved almost over night. There are indications for a general improvement in the lumber markets. Employment for at least the winter months, is assured the majority of the coal miners, providing the wage question can be adjusted satisfactorily. The steel industry has received some government orders, and anticipates others, which will provide employment for a good portion of steel workers for a few months. The conditions in the agricultural industry will again become normal as soon as the necessary wage and other adjustments are effected in other lines of industry, to bring the cost of living down to a point where farm products will have a normal exchange value.

So far as the particular work of this Division is concerned, the depression has been responsible for quite a number of resignations. Membership work in this territory is decidedly difficult, inasmuch as the prospects are mostly in isolated places and exceedingly difficult to get in personal touch with. However, before the end of the fiscal year, we hope to be able to report the receipt of sufficient applications for new members to offset the losses and show an increase besides.

The Division has been successful in many of its undertakings, and is planning on making the organization of greater use to its members. We shall not let our thoughts dwell too long on the dark spots of the past, but endeavor to keep them focussed on the bright ones discernible ahead. We are looking to the future with confidence.

Terminal Facilities at Moncton

Rather extensive improvements and additions have been under way at Moncton for the last year in connection with the railway terminal facilities. The new work consists of a round-house, power-house, machine shop, stores, and office buildings, tool-houses, water-tank, mechanical coaling plant, increased yard room, etc. It is estimated that the work will total in the vicinity of one million dollars, and will provide adequate facilities for expediting the handling of the ever increasing volume of traffic moving over this Division.

Hydro Electric Development

Accompanying this note are two cuts, showing the power development of the Bathurst Lumber Company, Ltd., from which the New Brunswick Power Commission is obtaining about 1,000 H.P. for distribution to some of the towns in the north-eastern section of the province. The delivery of a portion of this to the town of Newcastle marks the first definite accomplishment of the New Brunswick Government's policy for the supplying of cheaper electric power to the various sections of that province.

The next attainment will, probably, be the delivery of power, in the very near future, to the city of St. John, from the Power Commission's development on the Musquash River. In conjunction with this, the available power on the Lepreau River will probably be developed in order that the requirements of Rothesay, Hampton, Norton, Sussex, and Moncton, may be taken care of. The developments on the Musquash and Lepreau will be so situated that they may be tied into the one transmission system. The line from Musquash has been made heavy enough to carry the current from the two developments.

Developments in other sections are being planned; and it is most interesting to follow the progress of the policy which, unfortunately, was only inaugurated within the last two years.

Maritime Oil Shales

The exploitation of oil possibilities in other localities has so over-shadowed the attempts to develop the oil shales in the Maritimes, that perhaps it would not be amiss to remind those, who are interested in the development of Canadian resources, that large deposits of rich oil shale are to be found in both Nova Scotia and New Brunswick.

In Pictou County, N. S., there is an area of about 10 square miles, estimated to contain about 500,000,000 tons of shale which, according to tests, should yield a minimum of 30 gals. of oil to the ton of shale. Experiments are being carried on in Pennsylvania in connection with these shales, under the auspices of the owners of the property and working in conjunction with Dominion Government specialists.

In Westmorland and Albert Counties, near Moncton, N. B., are also to be found rich deposits of shale, estimated to contain about 270,000,000 tons. Tests would indicate that these deposits are richer in value of oil than the famous Scotch shales which have been profitably developed for years. A practical experimentation of these shales is being conducted by the Anglo Persian Oil Company, which organization has allotted in the vicinity of $6,000,000 for the purpose. At the present time quantities of the shale are being taken to Baltimore where the experiments are being carried on. The results so far are very encouraging, the average yield being about 33 imperial gallons of crude oil per ton of shale. If the further investigations are satisfactory, it is probable that a five thousand ton plant will be erected in the near future. With this plant and at the indicated average yield, it would mean a production of about sixty million gallons of oil per year.

The ultimate development of the shale deposits, and the allied industries, in Nova Scotia and New Brunswick, should mean much for the industrial future of the Maritime Provinces.

NEW DEVELOPMENTS OF 1921 ILLUSTRATED





Power Development on the Nepisiguit River, New Brunswick

The illustrations show two views of the power house built by the Bathurst Lumber Company, Limited, as part of their 9,000 h.p. hydro-electric scheme. The full production is not needed by the company and about 1,000 h.p. is being sold to the New Brunswick Power Commission, who in turn are constructing the necessary transmission lines by means of which a portion of the surplus power will be delivered to Newcastle and nearby towns.

This Month's Activities in Quebec Division

Headquarters of Division—113 Board of Trade Building, Montreal

Chairman.....J. H. Fortier, P. T. Legare, Ltd., Quebec.
Vice-Chairman....F. W. Stewart, Cluett, Peabody & Co., of Canada, Ltd., Montreal.
Secretary.....R W. Gould.

DECEMBER was a month of very much increased activity so far as meetings were concerned. Many of the trade sections held meetings and put their respective houses in order to greet the New Year. The Export Club of Montreal and District met once a week during the entire month, and a great deal of the preliminary organization work was completed.

Among the meetings we numbered the leather belting section, bottlers, paint and varnish, graphic arts, wooden box, transportation committee of the Export Club, lithographers, furniture manufacturers, three meetings Workmen's Compensation Act Committee, joint meeting Montreal Branch executive and executive Montreal Export Club, and the biscuit and candy section.

The month of January promises even greater activity than the previous month. The Quebec Legislature opens on January 10 and much important legislation affecting industrial interests is promised.

Meetings in Prospect

The January meeting of the executive committee of the Quebec Division will be held in the Old Colony Club, Windsor Hotel, on Thursday, January 12th. It will be a luncheon meeting. A large attendance of the members of the executive is expected in view of the fact that on the evening of the same day a joint dinner by the Export Club and the Quebec Division will be held, at which the speakers will be Hon. James A. Robb, recently appointed Minister of Trade and Commerce, and S. R. Parsons, ex-president of the association, who has just returned from the labor conference at Geneva, where he represented the employers of labor of Canada.

On January 19th, the Montreal Branch executive will hold a luncheon meeting in the Old Colony Club. In the case of the Division, the meetings have been held monthly at Three Rivers, Sherbrooke, Quebec and Montreal in turn. The February meeting of the Division will be at Three Rivers.

Workmen's Compensation

The first joint meeting between the representatives of the International Unions, the National Catholic Union of Quebec, and the representatives of the Quebec Division has taken place, with respect to amendments proposed to the Workmen's Compensation Act of the province.

Last year, when an effort was made to hold such joint meetings, the labor representatives were very keen to secure in the province of Quebec the operation of a law administered by a Commission. The result was that the entire question of Workmen's Compensation law was laid over until this year. Now, with the opening session of the Quebec legislature in the offing—it will meet on January 10th—the joint committee is working hard to get suggested amendments in such shape that they can be presented to the legislature some time this month or early in February, and a united front shown as between the two labor unions representing the employees and the Canadian Manufacturers' Association representing the employers.

Among the amendments suggested will be that lumbering and pulp wood in all its branches be taken in under the provisions of the act. Heretofore, the act, as in the province of Quebec, did not apply to these industries.

The law will be strengthened so far as those cases are concerned in which a workman from this province, working for a company in this province, is, during the course of his duties, injured, there will be no question as to the responsibility of the parties who should pay compensation. This is in order that the workman, in each and every instance, will not be the victim of long drawn out litigation.

It is proposed in each instance to increase all benefits as at present under the act, by thirty-three and one-third per cent. Employers will be bound to furnish necessary medical and hospital treatment free of charge, but retaining the choice of doctors and hospitals within their own jurisdiction.

The question of determining the average yearly wage of a workman who is injured whilst working temporarily, has been the subject of much discussion and study by the committee. It has been suggested that, in the matter of the time proper for remuneration, a leaf be taken from the Ontario law and adapted to the province of Quebec, which provides that time shall be computed upon the average weekly or monthly time worked during the twelve months previous to the accident by a person in the same grade employed in the same work by the same employer, and, if no person is so employed, then by a person in the same grade employed in the same work in the same locality.

An innovation that will doubtless be suggested will be the appointment of permanent medical boards all over the province by the provincial government. Boards to be composed of three surgeons of repute in each judicial district whose unanimous or majority decision shall be final in the matter of the degree of injury sustained by a workman in any case which may be in dispute.

Considerable interest is being manifested throughout the province in this matter of the amendment of the act.

Recently the Montreal Gazette in discussing the amending of the Workmen's Compensation Act of the province said editorially:

"The Legislature of Quebec, at its coming session, it is intimated, will be called on to consider amendments to increase the scope of the Workmen's Compensation Act. This act was placed on the statute book to meet conditions in the industrial field, which were held to be burdensome to the workers. There was in the old law provision for compensation for injuries sustained by employees in the course of their work; but the processes were those of ordinary compensation suits, and though they often resulted in the award of heavy damages the delays were felt to be a grievance. Something less costly and more expeditious was sought. A study was made of laws in other places; and on the report the existing law was framed. In one of the early decisions which its interpretation called for, Sir Louis Jette, in the Court of King's Bench, put it that the measure introduced entirely new principles into our law and had for effect to put employers in the position of insurers of their workmen against accidents while performing their duties, and this even when there was concurring or inexcusable fault on the part of the workmen. The employer must pay for the consequences of the workman's neglect, if the workman suffers harm therefrom. In interpreting the law the courts have been regardful of the idea of the Legislature, and real sufferers have gained from the cheap and more expeditious process, while employers have had the advantage of knowing the limit of their liability when claims arose against them.

"The law is one in the interests of labor, and those who speak in the name of labor have been active in seeking amendments. Some have been conceded, in the way of increasing the burden of employers. Others now being pressed have the same general object. One thing demanded may not now be granted. In some of the provinces the matter of dealing with compensation for industrial accidents has been taken out of the hands of the courts and placed in the control of special boards. These levy rates upon all industries operating in their jurisdictions, receive and consider all claims for compensation and award such sums as are deemed fit. It is alleged against this system that it encourages demands, and that it is expensive also in that it creates a special administrative machine which adds to the general cost. In considering the proposals the Legislature will do well to look at the principles involved as well as the plausibility of the proposals. Laws designed to benefit one class whilst another class must pay the expense may be expedient, but are not necessarily good."

Montreal Finances

The Macedonian Cry has gone forth from the City Hall in Montreal to the Canadian Manufacturers' Association, Montreal Board of Trade, Chambre de Commerce and other important public bodies for assistance in the matter of civic finance.

Recently Montreal by popular vote placed herself back in the column of aldermanic control after several years of commission government. The new civic rulers now find that they have not sufficient money with which to "carry on" and the "Come over and help us," call went forth.

A joint meeting between the council and representatives of the various public bodies enumerated above was held on December 27th. It was represented by the council that nearly two millions of dollars were needed to carry Montreal through the present fiscal year.

On asking for advice and counsel, Hon. Lorne C. Webster, president of the Montreal Board of Trade, suggested the formation of a civic finance committee to study this problem with the council, this committee to be composed of representatives from the Board of Trade, the Canadian Manufacturers' Association, the Chambre de Commerce and other similar bodies. This suggestion was acquiesced in by the other organizations and the indications now are that the C.M.A. of Montreal will get a closer insight into civic finances during the coming three months than it has ever had before.

Export Club Meeting.

The opening dinner of the Export Club of Montreal and District will be held in the Rose Room of the Windsor Hotel on Thursday January 12th, at 8 o'clock. In this dinner the Export Club of Montreal and the Quebec Division are joining hands and it is expected that there will be a particularly large turn out.

The principal speaker of the evening will be Hon. James A. Robb, recently appointed Minister of Trade and Commerce in the King Administration. Although the club has not yet the definite promise that Mr. Robb will be present, he was written stating that he is attempting to make arrangements to be present and expresses the belief that he may be counted upon to make his appearance on this occasion and address the club on the question of export trade.

In addition to this speaker another of equal importance will be present in the person of Mr. S. R. Parsons, ex-president of the C.M.A.

Ontario Division's Activities for the Month

Headquarters of Division, Bank of Hamilton Building, Toronto

Chairman.....W. C. Coulter, Booth-Coulter Copper and Brass Co., Ltd., Toronto.
Vice-Chairman.....A. W. White, Geo. White & Sons Co., Ltd., London.
Secretary.....H. Macdonald. Travelling Secretary.....O. C. Pease.

ONTARIO Division was represented at the official opening of the Queenston-Chippawa canal and power house on December 29 by W. C. Coulter, chairman; R. H. Easson, chairman of Toronto Branch and H. Macdonald, secretary. About a thousand delegates from perhaps 200 Ontario municipalities were present, when Premier Drury turned the wheel controlling the pent-up water in the canal 300 feet above the power house. The formal turning on of the power was followed by a luncheon.

The Lightning Rod Act, 1921

In connection with the new Lightning Rod Act, which takes effect on 2nd January, 1922, having for its object the standardization of equipment and methods of installation, a representative committee appointed by the various organizations affected, including the Canadian Manufacturers' Association, has considered draft rules and regulations at a joint meeting held in the Parliament Buildings, Toronto. H. Macdonald, Legal Secretary, representing the C. M. A.

The Lightning Rod Act provides that all persons selling or installing lightning rods in Ontario will require to take out a license. Before the license is granted, they will have to guarantee that if a building rodded by them should be damaged by lightning, they will return in full the cost of the lightning rod and repair the damaged building. Every licensee will have to file a bond for $5000 guaranteeing their fulfilment of these requirements. Legal process will be servable on the Fire Marshal and for the same effect as though served on the licensee. Each licensee will be charged a fee of $50, and will be required to pay a tax of 80c on each $100 in Ontario,—the tax to be allotted to the Fire Marshal's Department.

Each agent of every licensee will also require to be licensed at a fee of $3.00. They must be residents of Ontario and will be required to carry the license to furnish each customer with a copy of the Act and regulations and with a certificate that the installation is made in conformity with the regulations. Buildings and structures equipped with standard rods and materials installed and maintained in compliance with the Lightning Rod Act and the Regulations will provide a high degree of fire and accident protection from lightning.

Unemployment Relief

The special committee appointed by the Ontario Government on unemployment, has carried out important arrangements to provide for unemployment relief during the winter season.

At a meeting held on December 1, a memorandum received from the Dominion Government in regard to the part it was prepared to play in connection with relief work, was submitted to the committee. From investigations made, the committee find it is beyond question that all classes are opposed to the dole system and that it is an imperative duty, resting upon the Governments, to provide relief work. It is found, generally speaking, that unemployment condition in Ontario is better than it was last season. The arrangement arrived at by the Provincial Government on the recommendation of the Advisory Committee is on the following basis:—

(a) The municipality to bear the nominal cost of carrying on the work in the normal working season.

(b) Estimates of nominal cost to be submitted to and approved by the provincial government, nominal cost to be the cost of carrying out the work in the normal working season, and under normal working conditions.

(c) The provincial government to bear equally and jointly with the municipalities and the federal government, each in the pro portion of 1-3 the actual cost over and above the estimated nominal cost. Actual cost to include the cost of winter work due to inefficiency of labor, substitution of labor for machinery and the difference, if any, between winter prices paid for materials and those current at the time of relieving the unemployment.

(d) Applications for payment of provincial assistance to be accompanied by a certificate from the municipality in a form to be provided by the Department of Labor, showing the nature and amount of work undertaken and the expense incurred. Payments by the provincial government to be made, when the certificate has been approved by the provincial government and by the Dominion Government.

(e) No payment to be made in respect of any work done or materials used after the 31st day of March, 1922.

Reorganization of Safety Associations.

The new secretary-treasurer of the Industrial Accident Prevention Associations of Ontario, R. B. Morley, has prepared and issued a report on the re-organization of the Associations. Mr. Morley points out that the pay-roll in Schedule I of the Ontario Workmen's Compensation Act in 1920 was roughly, $136,000,000, while to protect the men earning that vast sum the Safety Associations spent only $15,228, or slightly over one cent per hundred dollars of pay-roll. With approximately 350,000 workers protected under Schedule I, this means that the sum of 13 cents per worker was spent in protection. Compare this with the efforts of the United States Steel Corporation, which in a period of 8¾ years, spent $7,538,241 on accident prevention alone, or at the rate of of $3.33 per employee per annum. Of course, the Ontario figure refers only to the work of the Safety Associations and not to the work of individual industries.

"The re-organization of the Industrial Accident Prevention Association as to personnel," explains Mr. Morley, "is divided into two heads, (a) office staff and (b) inspection staff. The re-organization of the office staff has taken place in part and will be completed gradually.

"The inspection staff consists of six inspectors, with experience with the Association ranging from about nine months to five years. The inspectors, in most cases, were appointed because of their knowledge of certain classes of industry and the hazards thereof. The result of this has been that each inspector has specialized on his own particular industries, and in most cases, appears to have studied the physical side of accident prevention only. The system of inspection, as carried out, is undoubtedly useful and productive of much permanent good, but by the expenditure of twice or three times as much money and effort, many times the good should be accomplished, if we have the right inspectors. If not, we must secure others.

"The enormous sums paid out for compensations each year call for drastic action and it is recommended that the present system of inspection should be thoroughly revised by placing an inspector in charge of a designated section of the Province, having six, seven, or eight such sections under a resident officer, with an office and stenographer.

"The man so placed would become a centre for all safety work in his section. He would become part of the community life and would devote his whole time to teaching and preaching safety, continuing the inspection work as part of his general campaign.

"These inspectors or local secretaries would report once each week to headquarters by mail and once each month in person for a round-table conference here.

"The inspection work would, of necessity, be continued. We are often told that 75% of industrial accidents can be prevented by safety education and 25% by safeguarding. The 25% however, includes a high percentage of the costly accidents such as permanent disablement and death, and is of vital importance in calculating accident costs."

Officers of Safety Associations

Annual meetings of the Furniture Manufacturers' Safety Association, Woodworkers' Accident Prevention Association, Ceramics and Stove Safety Association and Metal Trades Safety Association for Ontario were held during November. Since then meetings of directors were held and chairmen and vice-chairmen elected. The following are the new officers:—

Class 5, Furniture Manufacturers' Safety Association. Chairman, D. M. Wright, McLagan Furniture Co., Stratford; vice-chairman, J. H. Kennedy, Malcolm & Hill, Ltd., Kitchener.

Class 4, Woodworkers' Accident Prevention Association. Chairman, W. S. Morden, Dominion Match Co., Ltd., Toronto; F. Kent, Seaman Kent Co., Ltd., Toronto.

Class 6, Ceramics and Stove Safety Association. Chairman, J. F. M. Stewart, Pointe Anne Quarries Limited, Toronto; vice-chairman, C. A. Millar, Ontario Sewer Pipe Co., Mimico.

Classes 7, 8, 9, and 10. Metal Trades Safety Association. Chairman, A. R. Goldie, The Goldie & McCulloch Co., Limited, Galt; Vice-chairman, J. C. Callaghan, Steel Co. of Canada, Limited, Hamilton; W. H. Burgess, International Malleable Iron Co, Guelph; W. G. Turnbull, Turnbull Elevator Co., Limited, Toronto; W. S. Campbell, Dominion Forge and Stamping Co., Limited, Walkerville.

Ontario Companies Amendment Act 1921

All incorporated companies, whether federal or provincial, are notified that at the last session of the Legislature, the Ontario Companies Act was amended as follows:—

"On or before the first day of February in each and every year, every corporation, whether incorporated under the laws of Ontario or otherwise, which has its head or other office, or is doing business, or any part thereof, in the Province of Ontario, and not being a corporation liable to payment of taxes under The Corporations Tax Act, shall, without notice or demand to that effect, make out, verify and deliver to the Provincial Secretary on or before the 8th day of February each year, a detailed statement or return containing certain information as of the 31st day of December next preceding."

If a corporation makes default in complying with the above, such corporation shall be liable to a penalty of $20. for every day during which the default continues, as provided by Section 135 of the Ontario Companies Act.

Blank forms for making the returns may be obtained at the Provincial Secretary's office, Parliament Buildings, Toronto.

Activities of the Month in Prairie Division

Headquarters of Division, 408 Avenue Block, Portage Avenue, Winnipeg

Chairman.....W. G. Fraser, Beaver Soap Co., Ltd., Winnipeg.
Vice-Chairman.....J. W. Ackland, J. D. Ackland & Sons, Winnipeg.
Secretary.....G. E. Carpenter.

THAT the work of the Manufacturers' Association is appreciated in some quarters, notwithstanding the result of the recent election in the Prairies, is evidenced by the fact that six more applications for membership have been received since the last publication of "Industrial Canada." This makes sixty-three members that have been added to the roll since the annual convention. The new members are:—

Bouey Bros., Ltd., Winnipeg.
A. & M. Hurtig, Winnipeg.
Winnipeg Top and Trimming Co., Winnipeg.
The Sterling Mfg., Co., Ltd., Winnipeg.
Can. Shirt and Overall Co., Ltd., Winnipeg.
Rolfe Radiator Mfg., Co., Winnipeg.

Insurance

For sometime past the Insurance Committee of the Division has been looking into the fire insurance situation and has reached the conclusion that rates are unduly high compared with other territories, when the ratio of loss is taken into consideration. In looking for some relief from this situation the Insurance Committee has had the benefit of a discussion with Mr. Detrimers of Willis Faber and Company, managers of the Insurance department of the Association, and more recently with N. S. Jones, General Manager for Canada, for the North Western Mutual Fire Association. It was hoped that Messrs. Willis and Faber could see their way clear to open a Branch in Winnipeg, but failing to secure this the Committee was impressed with the services that the Northwestern Mutual Fire Association had rendered the retail merchants in Canada last year. Shortly, their proposition is to insure preferred risks at Board Companies tariff rates and at the expiration of the poilcy return to the policyholders the unabsorbed premiums, after paying expenses and setting aside proper reserves. It is stated that for 21 years operation the Northwestern have returned 26% of premiums and last year the return to manufacturers was 30%.

The Insurance Committee obtained reports upon the standing of the North Western Mutual and its allied companies, which were satisfactory, and the Retail Merchants Association spoke very highly of its services of last year.

The recommendation of the Insurance Committee that the particulars of the Northwestern plan be placed before the membership with a view to ascertaining what portion would be interested in following the matter up further was approved at a recent meeting of the Executive and is being acted upon at the present time.

A Mall for Winnipeg

By a vote of 9 to 8 the City Council of Winnipeg gave first reading to a by-law providing for the opening up of an approach from Portage Avenue to the New Capitol Building. It is planned to open up a new wide thoroughfare from Portage Avenue to the main entrance of the Capitol building. This will entail the closing of several streets, the demolition of many buildings and the erection of others to take their place. It is expected that the work will involve $10,000,000 and furnish employment for thousands of men. Also that it will result in the immediate construction of a store by the Hudson Bay Company, whose property is affected by the plan, at an expense of about $5,000.000. It is stated that the net cost to the City will be less than $200,000.

Ready for Action—Election Day

"The C.M.A. stands for Service for members,—all the time and everytime!" So exclaimed one enthusiastic member of the Prairie Division in summing up the feelings of a large and interested audience assembled at the Association office at the kind invitation of the Chairman and Secretary of the Division to witness the results of the Federal Elections hot off the wires on December 6th. This, instead of standing crushed in the crowded street outside in the cold. Just another little service for the convenience and comfort of our members, and very much appreciated as the above opening remarks show.

As the results were flashed across the private telegraph wire, installed for the occasion, they were announced, and as the final returns from the different constituencies came through, they were immediately posted up on the boards for all to see, while an up to date summary was kept all the time. A telephone service maintained for the convenience of the sick and lazy who could not or would not attend was in continuous use. The offices from 5 p. m. till midnight were filled to overflowing with enthusiastic members of all "creeds and beliefs," and as particulars were flashed through and the evening wore on interest became intense.

Cigars kindly donated by W. Gordon Fraser, Chairman of the Division, helped to cement further the good fellowship which prevailed throughout the evening.

Pioneer of Winnipeg Passes Away

Alex. Davidson, president of the North-West Laundry Company, and formerly a member of the Executive Committee of the Prairie Division, died on December 12th after a short illness, from pneumonia. Mr. Davidson came to Winnipeg in 1887 direct from Cookstown, County Tyrone, Ireland.

Winnipeg Winter Carnival

A committee of Winnipeg business men have arranged for an open-air Carnival to be held in the Parliament Building grounds during the Bonspeil Week, commencing February 6th. The undertaking will include a ski slide 150 feet high and an immense toboggan slide. The largest open-air skating rink in Canada will be provided for. In addition to this there will be the annual Bonspeil Tournament, hockey matches, dog races, horse races, etc.

The proposed Carnival is to be financed from the sale of bonds bearing entrance privileges and votes for the selection of a Queen. There will be a Carnival Queen, and two Princesses, selected by popular vote.

Winnipeg Exhibition

The Winnipeg Board of Trade is out to re-establish the Winnipeg Exhibition. W. E. Milner, Secretary of the Board, has addressed numerous audiences and advocated a plan for this, and at a recent meeting of citizens of Winnipeg, held in the Board of Trade auditorium the following plan was adopted unanimously:—

The plan involves submission of a by-law at the next civic election authorizing the City to sell debentures to the value of $1,000-000 to finance the undertaking, and organization of a holding company capitalized at$200. 000 to manage the exhibition. The total outlay would increase taxation one-third of a mill over a period of thirty years, Mr. Miller said. The immediate outlay would be $949,000, exclusive of site. Mr. Milner quoted figures to show that an attendance of 60,000 persons per day during the exhibition reasonably might be expected.

The tabulated outlay given in Mr. Milner's report was as follows:—

Grand Stand	$60,000
Main Building	200,000
Auto and electricity	175,000
Machinery and vehicles	175,000
Stock arena	150,000
Cattle sheds	50,000
Horse barns	40,000
Drainage	10,000
Poultry	25,000
Executive	10,000
Fencing	10,000
Car parking area	25,000
Walks and roads	15,000
Band Stand	4,000
Total	$949,000



Election Returns at Winnipeg Office

Arrangements made for supplying members of the C.M.A. in Winnipeg with results of General Election. G. E. Carpenter, Secretary of the Prairie Division, will be recognized in the foreground.

News from British Columbia Division

Headquarters of Division, 705 Board of Trade Building, Vancouver

Chairman.....J. B. Thomson, Jas. Thomson & Sons, Ltd., Vancouver
Vice-Chairman.....R. W. Mayhew, Sidney Roofing & Paper Co., Ltd., Victoria
Secretary.....H. Dalton

THE fall session of the B. C. Legislature prorogued on December 3rd after being in session for six weeks and having dealt with in that time a number of measures of vital interest to employers in British Columbia, and to those in other parts of Canada having interests in this province. The Chairman and Executive of the B.C. Division of the Association took a leading part in making the necessary representations to the government and it is gratifying to be able to report that those measures, the effects of which would have been inimical to the manufacturing industry, were either withdrawn before being placed before the Legislature, or were defeated when brought to a vote. The principal measures with which the B.C. Division Executive had to deal were:—

(1) A proposal to establish a uniform eight hour day in all industry throughout the province.

(2) A proposal to impose a personal property tax in addition to the existing Provincial Income Tax.

(3) Proposed amendments to the B.C. Workmen's Compensation Act which would have had the effect of greatly increasing assessments of employers.

The Division were also successful in having certain amendments made to the B.C. Liquor Control Act facilitating the securing and handling of alcohol used by members of the province engaged in the preparation of pharmaceutical preparations, extracts and certain food products.

A complete review of the legislation dealt with at the last session of the B.C. Legislature will appear in a later issue of INDUSTRIAL CANADA.

New Steamship Freight Rate

The steamship lines operating into Vancouver from Europe and the United Kingdom by way of the Panama Canal, have announced a flat rate of 25 shillings per ton on general cargo. From information given to the Vancouver office of the Association, it does not appear that this rate is likely to be permanent; but even should this rate be slightly advanced, it would appear to be almost certain that there will be a marked increase in the distribution of British and European goods through British Columbia ports.

Minimum Wages

The Minimum Wage Board of B.C., at hearings held here in December, indicated their intention of issuing an order establishing minimum wages for women workers in a large number of industries in the province on the basis of $8 per week for the first month's apprenticeship; $10 per week for the second month; $12 per week for the third month, and thereafter $14 a week.

New Jam Factory in B.C.

The announcement is made from Victoria that H. Beach, formerly of the King-Beach Manufacturing Company at Mission, B.C., and H. G. Eakins, proprietor of the Druggists Sundries Company of Vancouver, have joined forces for the purpose of taking over the premises of the Hamsterley Farm Jam Company in Victoria for the purpose of packing jams, preserves, and crushed fruits. Mr. Beach is a relative of the principals of the well-known Worcestershire (England) firm of jam manufacturers of the same name, and is a man of long experience in the jam manufacturing business, with a reputation as an expert in his line. Mr. Eakins has also had extensive experience in the preparation of crushed fruits and fruit syrups, and with a factory located in Victoria in such close proximity to the famous Saanich and Gordon Head fruit growing districts, there is every prospect of Messrs. Beach and Eakins making a success of this new enterprise.

Britannia Mines to instal Million Dollar Mill

The rebuilding of the big ore concentrator and mill at Britannia Beach, B.C., involving an outlay estimated in excess of $1,000,000, is reported to have been authorized at a recent meeting of the chief officials of the Britannia Mining & Smelting Company. Further, it is understood that the equipment ordered and the mill buildings on which construction is to be started soon, will have an even larger capacity than the mill which was destroyed by fire last spring. The new mill and concentrator will have a daily capacity of 2,500 tons, which will make it the largest copper ore handling mill in British Columbia. An order for the equipment necessary for this mammoth mill has already been placed with a big steel plant at Allentown, Philadelphia, which specializes in this class of equipment.

In the equipment to be delivered are 18 tube mills of 7 by 10 foot size, a set of 72 by 20 inch rolls, and four sets of 54 by 20 inch rolls. The equipment will weigh more than 700 tons and is to be shipped by water, coming by way of the Panama Canal from the plant at Allentown, Pa. It is all to be delivered within six months.

Duty on Magazines

Members of the Vancouver Board of Trade, at a meeting held on December 13th, unanimously passed a resolution calling on the government to impose on American and other foreign magazines the same rates of duty as are now charged on straight advertising matter. This would mean the collection of a duty of 10c. per pound on British periodicals and 15c. a pound on similar publications coming from other countries.

Industrial Relations Bulletin

A BILL is to be introduced at the coming session of the New York State Legislature providing for an Industrial Court modelled on the Industrial Court which has been in operation for several years, in the state of Kansas. This Court, it should be explained, has very wide powers, its jurisdiction covering, among other things, all questions connected with transportation, food, fuel, and clothing. The American Federation of Labor, which has always been opposed to the Kansas Industrial Court, has announced that it will oppose the bill which is now to be introduced in New York State.

A bill is to be introduced at the next session of Congress providing that the head of the Executive Departments should prepare periodically plans for public works and that the Secretary of Commerce should prepare and publish monthly reports concerning the trend of business conditions, the approach of business strain and over extension, in order that public officials and private industrial enterprises may properly prepare for and plan against such periods and authorizing the head of each Executive Department, upon the advice of the President, to postpone the date of the commencement or retard the prosecution of work on public projects as may be necessary to prepare for or prevent a further rise in the cyclical wave of industrial expansion, or to enter upon the maximum program of public works in order to counteract industrial depression.

Picketing

1. Chief Justice Taft in giving judgment on December 6th in the case of American Steel Foundries Company vs. the Tri-Cith Trades Council said that in the matter of picketing each case must turn on its own circumstances. "I think that the strikers and their sympathizers engaged in the economic struggle should be limited to one representative for each point of ingress and egress in the plant or place of business, and that all others be enjoined from congregating or loitering at the plant or in the neighboring streets by which access is had to the plant, that such representatives should have the right of observation, communication and persuasion, but with special admonition that their communications, arguments, and appeals shall not be abusive, libelous or threatening, and that they shall not approach individuals together but singly, and shall not in their single efforts at communication or persuasion obstruct an unwilling listener by importunate following or dogging his steps. The general principle should be to prevent the inevitable intimidation of the presence of groups of pickets but to allow missionaries."

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2. In the case of the Newport Costume Company vs. Schlesinger (November 1st, 1921) where the plaintiff Company asked that a trades union should be enjoined from picketing the place of business of the company, it was held that it was the duty of the trades unions to see to it that a strike in which its members were engaged was carried on without coercing and intimidating workmen who wished to continue in the service of the employer in question.

The Price of Industrial Peace

Mr. B. S. Rowntree, President of Rowntree and Company, Limited, of England which employs some 7,000 men, has recently in the United States laid down the following 5 conditions of industrial peace:—

1. A fair wage.
2. Reasonable working conditions.
3. Protection against unemployment.
4. The status of the worker.
5. Profit-sharing.

The only one of these conditions which requires explanation is number 4. What Mr. Rowntree means by "the status of the worker" is that "there must be cultivated in the factory worker the maximum of co-operation, self-reliance, self-government and enthusiasm, and the lowest practical minimum of discipline and overhead supervision. The democracy and freedom prevailing outside of the factory must not stand out in too great contrast with dictation within the factory. To this end machinery must be adopted for **common counsel** and mutual understanding relative to conditions under which the worker is employed. Let him not feel that he is never consulted concerning the orders which confront him on the bulletin board and which control his conduct for at least one-half of his working hours."

Transportation Department

Reduction in General Rates, and Other Transportation Matters of Interest

Classification No. 17

Reporting to the December meeting of the Executive Council, the Transportation Committee gave the following information with regard to the progress of the Joint Committee in connection with proposed Classification No. 17:—

"The Assistant Manager, who is a member of the Joint Classification Committee, advised briefly as to the progress which has been made in connection with Proposed Classification 17. He stated that fourteen meetings had been held since last March, totalling a period of twenty eight days, and that so far the items dealt with by conference with manufacturers and other shippers had been very satisfactorily adjusted to the satisfaction of all parties. The items which have been considered are as follows:—

Acids,
Lime,
Potassium,
Soda,
Agricultural Implements,
Furniture,
Wire Fencing,
Sheet Metal Work,
Metal Shingles, Eavetroughs, etc.,
Ammonia,
Store and Office fittings,
Pipe Fittings and Valves,
Glassware,
Paints and Varnishes,
Nursery Stock,
Ammunition and Explosives,
Asbestos Articles,
Electrical Apparatus,
Machinery and Appliances,
Transmission Machinery,
Conveying and Elevating Machinery,
Printers' Ink,
Blacksmith's Machinery,
Shoe Machinery,
Cereals and Cereal Products.

"In connection with the question of ratings on machinery and agricultural implements which are now shown as sixth class in the classification, the Committee have not as yet ruled definitely on this point and from the stand which they have taken in negotiations regarding the subject it would appear as if it may be necessary to take this question to the Board of Railway Commissioners when the matter is finally considered.

"In addition, the Committee has also considered the various rules and in connection with a number of them have discussed the matter with representatives or manufacturers and other shippers. Quite a number of modifications have been made in these rules, from those originally proposed and it is felt that in general, they should be quite satisfactory.

"It is expected that meetings will be continued the best part of next year and that Proposed Classification 17 will not likely be in effect until 1923."

Freight Rate Reduction

The Transportation Committee made the following report on the recent freight rate reduction, at the December meeting of the Executive Council:—

"The Assistant Manager advised regarding the recent decision of the Board of Railway Commissioners' General Order Nos. 350 and 351 making a reduction on freight rates and parlor and pullman car fares within points in Canada. The members were fully advised in a circular issued by the Transportation Department, No. 333, of this decision and particularly urged to keep a careful check on all freight bills from December 1st as there was likely to be some delay in distributing the tariff to and from Northwest and Pacific Coast. This delay it was thought would probably cause the higher charges to be assessed by the agents until they receive the tariffs which are effective on December 1st., no matter when they are issued.

"It will be recalled that your Committee presented a memorandum to you which was adopted and a special Committee appointed, this special Committee presenting the memorandum to the carriers in August. The Transportation Department took this matter up further with the carriers in the early part of November, pointing out that as the wage question had been settled we now saw no reason why the rates should not be reduced. The Board of Railway Commissioners at the same time apparently took somewhat similar action regarding their decision to make a general reduction in rates, This reduction, being general in nature, naturally is a very small amount on each rate, but the Commission could not see their way clear to make a greater reduction under this basis."

New Shipping Company

Guy Tombs Limited, of 285 Beaver Hall Hill, Montreal, is the name of a new forwarding and shipping company, for which a Dominion charter has been granted.

Guy Tombs, the president and manager, has been active for nearly thirty years in Canadian transportation service and was formerly assistant freight traffic manager, Canadian Northern Railway, Eastern Lines, where he labored for eighteen and a half years. Mr. Tombs is also vice-chairman of the Transportation Bureau of the Montreal Board of Trade, a member of the Canadian Pulp and Paper Association, Canadian Manufacturers' Association, and other commercial bodies.

Mr. Tombs is taking with him the personnel and duties of the traffic department of the Canadian Export Paper Co., Ltd. and associated mills, with which he has been connected for the last two and a half years.

This is the first industrial traffic bureau in Canada to undertake all transportation work and special attention will be given to the handling of overseas business through Canadian ports.

The firm of Guy Tombs, Limited, have also been appointed agents for Montreal for the following steamship lines:—the White Star-Dominion Line, Anchor-Donaldson & Cunard Lines, Canadian Pacific Steamships, Limited, Holland-American Line and French Line.

Rate Reduction in United States

The Interstate Commerce Commission granted special permission to the carriers in the United States No. 56150 dated December 16th granting authority to make effective on short notice a 10 per cent reduction in freight rates on products of the farm, garden, range and orchard. The commodities are of course specifically enumerated and cover a large range of grain and grain products, hay, butter, cheese, eggs and poultry, cotton, cotton seed and cotton seed hulls, tobacco, fruit and vegetables, fresh or green and dried or evaporated, live stock and peanuts.

This reduction is to be applied generally speaking all over the United States with the exception of rates between points within New England territory.

Where reductions have recently been made on these commodities which exceed 10 per cent no further reduction will be made. Where a reduction has not exceeded 10 per cent rates will be reduced so as to equal a 10 per cent reduction. In this connection it is interesting to note that the carriers are also putting into effect under a decision of the Interstate Commerce Commission a 20 per cent reduction between points within Western territory in the United States. It is our understanding that the 10 per cent is not to be in addition to this 20 per cent. In other words wherever the 20 per cent applies the 10 per cent will not be applicable.

Equalization of Rates

The general investigation re equalization of Eastern and Western freight rates which was started shortly after the decision of the Board of Railway Commissioners in connection with the so-called 40 per cent. advance case, will be concluded at St. John on January 19th, to be followed by a hearing in Ottawa on February 15th, 1922, for the purpose of final argument in connection with the various phases of this case.

It will be recalled that the British Columbia phase of this matter was dealt with at hearings in Vancouver commencing October 17th, and ending October 20th and this same question was spoken of at a number of points in British Columbia and the Prairie Provinces. At Winnipeg, the Winnipeg Board of Trade through Isaac Pitblado, who had been retained as Counsel, offered opposition to the case presented by British Columbia.

The hearings to be held in the Maritime Provinces at Halifax on the 17th and St. John on the 19th of January are for the purpose of taking evidence on the Maritime Province phase of the general investigation re Eastern and Western rates; the chief item for consideration being the question of arbitraries used in construction of freight rates from and to the Maritime Provinces and points West of Montreal. Any representations on behalf of interests located in Ontario and Quebec will be presented at the final hearing in Ottawa, February 15th.

It will be seen that this case has to deal with alleged territorial discriminations and as the evidence which has so far been placed before the Board deals principally with the question of rates in British Columbia and the Maritime Provinces it may be that the Prairie Provinces, Ontario and Quebec will have some evidence to submit at the hearing in Ottawa on February 15th.

New S.S. line inaugurated from Vancouver, to West coast of Mexico, Central America and South America.

The Transportation Department has just been advised by the Foreign Freight Department of the Canadian National-Grand Trunk Railways to the effect that a steamship service known as the Latin- America Line has been established with monthly sailings from Vancouver to West Coast of South America, Central America and Mexico. These services will touch at the following ports by the steamers mentioned.

S.S. "Remulus," Callao, Peru.
S.S. "Regulus," Mollendo, Peru.
S.S. "Remus," Arica, Chile, Antefagasta, Valparaiso, Chile.
Steamers. Mexican and Central American ports of call.
S.S. "Baja California," Mazattàn, Mexico.
S.S. "Sinalca," San Blas, Mexico, Manzanilla, Mexico, Acapulco, Mexico, Salina Cruz, Mexico, San Josa de Guatemala, Guatelmala, Acajutla, Salvador, La Union, Salvador, Amapala, Honduras, Punta Arenas, Costa Rica, Corinto, Nicarague, Buenaventura, Colombia, Balboa, Panama Canal Zone, Guayaquil, Ecudor.

For the present the rail rates will be the regular domestic rates to Vancouver. Ocean rates may be secured from the Foreign Freight Department of Canadian National-Grant Trunk railways at principal points throughout Canada. Local receipts will be exchanged for ship's bill of lading at Vancouver on account of the fact that no through bills of lading will be issued for the present.

General Rate Hearing in United States

THE Interstate Commerce Commission on December 14th commenced hearings at Washington in connection with general rate inquiry Docket No. 13293. This hearing, which was a sort of preliminary one, adjourned at 4.30 p. m. on Saturday, December 17th. Hearings were resumed on January 11th at Washington.

The carriers were first called upon to present their case and, while they stated that they were not fully prepared to proceed, they offered evidence on features which had been prepared. Quite a number of shippers' representatives were present at this hearing including the president, executive secretary and counsel for the National Industrial Traffic League.

Various shippers' representatives called a meeting for the purpose of appointing a steering committee to collate the various requests of shippers' representatives for time in which to present testimony at the January hearing.

John S. Burchmore, counsel for the National Industrial Traffic League and a number of individual shippers, in order to clear up uncertainty, if possible, made a statement substantially as follows:

"We have assumed that the purpose of this proceeding is to enable the commission to make an early and authoritative announcement to the country as to the true transportation situation, with definite findings as to the reasonableness of the present rates as a whole; the ability of the carriers to stand a general reduction in rates and revenues; the need of the public for general reduction on any or all commodities; and if a general reduction is warranted or necessary, a further announcement that it should apply uniformly on all commodities or only on certain particular kinds of traffic, such as agricultural products, or road building materials, etc., etc.

"The importance of an early determination of these matters already has been emphasized in the testimony of railroad witnesses.

"There seems to be a real danger that this case will develop into such a complex and extended affair that its purpose may be defeated by the delay.

"There is a general uncertainty as to the the scope of the inquiry and the character of the showing that will be permitted from each industry or group of shippers. At the same time there is a general impression that representatives of certain interests who have been quite active recently in trying to obtain reductions intend putting in more or less extensive testimony addressed to the rates on their particular commodities with a view to obtaining special reductions on their freight, regardless of the ability of the carriers to stand a general reduction.

"To permit certain interests to pursue the matter in that way and deny others the same right and opportunity would of course, be unfair; and to hear all may defeat the first purpose of the investigation.

"In order that the scope of this inquiry may be fully and clearly understood, and various groups of shippers enabled to decide whether they should participate by testimony, and if so to what extent, we ask the Commission to define by an announcement the extent to which it will consider and therefore receive evidence concerning, the reasonableness of rates on a commodity or related group of articles; **second,** the extent to which shippers will be expected to resort to formal complaints as a better method of obtaining definite orders affecting the rates on individual commodities; and if the Commission recommends such complaints rather than participation in this case as the better method for trying out particular commodity bases, what assurance may we have now that the decision herein will not in any degree prejudice such complaints if and when brought and submitted for decision.

"We desire further to suggest that inasmuch as the intrastate rates in most of the states now bear the general advances granted by this Commission, the order instituting this inquiry ought to include the subject of such state rates or in the alternative all testimony with regard thereto should be excluded because not directly involved."

In answer to this Commissioner Hall, who presided at the hearing, stated substantially that there was no limit to the scope as defined in the order instituting the investigation. The hearing is not intended in any way to interfere with complaints already filed with the Commission attacking particular rates or with the filing of new complaints.

When hearings resume on January 11th the various phases of this question will be taken up as per the following:

Jan. 11–14	Direct testimony of carriers.
Jan. 16–18	Cross examination of carriers' witnesses.
Jan. 19–20	Coal and coke.
Jan. 21–23	Ore, furnace materials and iron and steel articles.
Jan. 24–25	Sand and gravel, brick, lime, cement, gypsum and asphalt.
Jan. 26–27	Lumber and forest products.
Jan. 28	Fertilizer and materials, sulphuric acid, phosphate rock.
Jan. 30–Feb. 4	Testimony of public and shippers as to general aspects of case.
Feb. 8	Vegetable oil and soap.
Feb. 9	Grain, flour and agricultural products.
Feb. 10	Live stock and packing-house products.
Feb. 11	Petroleum and petroleum products.
Feb. 15	Canned goods and wholesale groceries.
Feb. 16–17	Fruits and vegetables.
Feb. 18	Milk, cream and dairy products.
Feb. 20	Beverages and beverage containers, waste material.
Feb. 21–22	Other commodities.

It will be noted that this contemplates hearings continuing until late in February and therefore looks as if any decision of the Interstate Commerce Commission on the subject could not be rendered until March or April.

(Note:—We are indebted to the National Industrial Traffic League for considerable of the information contained in the above item.)

Abrogation of War Tax

Section 500 of the new United States Revenue Act, 1921, repeals the 3 per cent. tax on freight charges, 1 per cent. tax on 20c. paid on other express shipments, 8 per cent. tax on transportation via pipe line, 8 per cent. tax on passenger fares, also 8 per cent. tax on pullman fares provided for under subdivisions (a), (b), (c), (d), and (e) of Section 500 of the Revenue Act, 1918, on such transportation within the United States.

This new revenue bill does not repeal the 50 per cent. pullman surtax which accrues to the railways and not to the United States revenue.

At the present time, shipments from the United States to points in Canada, moving under the through bill of lading, are not subject to this tax, but shipments from Canada to points in the United States are subject to the above tax on that portion of the charges applying on the services performed within the United States.

Under the United States Treasury Department Decision 3255 and 3256, dealing with the repeal of the above taxes, it is provided that where freight is accepted for shipment up to midnight December 31st, 1921, on which the transportation charges are prepaid or contracted for prepaid, the tax shall be collected. Where shipments are forwarded collect at destination, however, and the transportation is completed on and after January 1st, 1922, the tax does not apply on such transportation charges. It is further provided that, in adjusting any freight overcharged, and in redeeming unused or partially used passage tickets, the carrier is not authorized to make any refunds or adjustments of the tax on and after January 1st, 1922. Refund of transportation tax, in such instances, can be made only by the Commissioner of Internal Revenue, Washington, D.C., and the carriers will arrange to furnish special forms to their patrons for use in connection with such refunds on and after January 1st, 1922.

Rule 24, Supplement 15 to Canadian Freight Classification to be cancelled Temporarily.

This Rule reads as follows:—"Unless otherwise provided in the separate description of articles, the less than carload ratings shown apply only when each loose piece of freight or each package weighs 20 pounds or more, also on shipments in bales or crates weighing each less than 20 pounds, provided each such package measures 36 united inches or more, length, wifthd and depth added.

"The less than carload ratings on loose pieces of freight or packages weighing each less than 20 pounds (except shipments in bales, boxes or crates measuring 36 united inches or more, length, width and depth added), shall be one class higher (greater) than that applicable on shipments complying with Section (a), of this rule."

On May 16th, 1921, Supplement 15 to Canadian Freight Classification 16, the above Rule, known as Rule 24, became effective. A number of complaints were received and the Transportation Department sent out Circular No. 315 calling upon interested members to supply information showing the effect of this Rule and any objections thereto. Quite a number of replies were received and the matter was finally brought before the Joint Classification Committee dealing with Proposed Classification 17. At this meeting it was made quite clear that the Rule as it stands today has a very serious effect on the businesses of quite a number of manufacturers and other shippers, in some cases applying to 100 per cent of the shipments made. After hearing the various objections presented by a large delegation of interested parties, the Committee decided that for the present this Rule should be cancelled. It was made clear, however, that it was the desire of the carriers to establish in Proposed Classification No. 17, when it finally takes effect, some Rule which would protect them in connection with the handling of very small packages or loose pieces. Those present agreed that they would be glad to discuss this question further with the carriers with a view to establishing a Rule which would be equitable to all concerned and overcome if possible the difficulties explained by the carriers. The carriers stated that they would have the present Rule 24 cancelled at the earliest possible moment and we have since received Order No. 31784, dated Ottawa, November 17th, giving authority to publish Supplement 18 to Canadian Freight Classification 16 containing the cancellation of this Rule.

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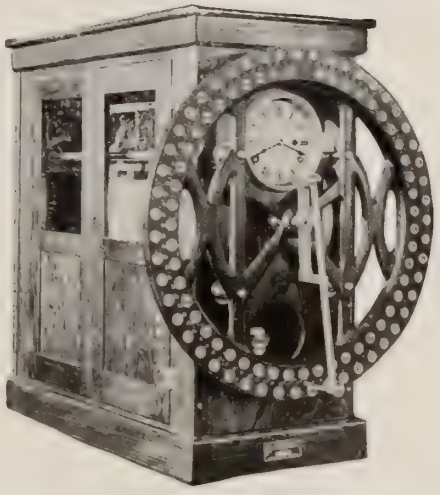
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Tariff Department Bulletin

Record of recent Board of Customs Decisions, Departmental Rulings, Excise Tax Rulings and other useful information.

Preferential Tariff with Australia

THE new Australian tariff bill, which was introduced in the Australian Parliament in March 1920, and which has been in effect since that time, is now being debated in the Senate of Australia and may be adopted any day. The Canadian Manufacturers Association, for many years, has strongly supported the negotiation of preferential tariff arrangements between Canada and Australia, similar to those existing between Canada and New Zealand. Since the introduction of the new Australian tariff, which is a very high tariff, the Association has redoubled its efforts, because under present conditions United States goods enjoy a distinct advantage over Canadian goods in entering the Australian market.

The New New Zealand Tariff

A NEW tariff has been framed and has been introduced in the House of Representatives in New Zealand and is now in effect though it is still being debated. The number of items in the tariff has been considerably increased. There are now 566 headings instead of 483. Under the old tariff 210 headings were subject to preferential surtax in favor of the British Dominions. Now 367 headings give preference to British Dominions. As a general rule the rates of duty payable under the British preferences provided in the new tariff about correspond with the British preferential tariff rates under the tariff which has been just superseded. But the tariff rates against foreign goods, provided in the new tariff, are substantially higher than under the former tariff. Thus there is now a greater preference for the products of the British Dominions when shipped into New Zealand.

The new tariff is framed in a different manner from that which it supersedes. Previously the tariff had been divided into schedules of goods that were dutiable and of those exempted from duty. There were two scales of duty—the British tariff and the preferential surtaxes, which were added to importations from foreign countries.

The new tariff is arranged according to the ordinary classification, comprising both dutiable and free goods in one schedule. The principal innovation is the introduction of three rates of duty—British preferential, intermediate, and general, similar to the new Australian tariff and the present Canadian tariff. The intermediate tariff is to apply to foreign countries entering into reciprocal relations with New Zealand.

The bill embodies an entirely new provision which is called an "Anti-dumping Clause" and is designed to regulate the values of imports from countries whose currencies are depreciated. This clause reads as follows:—

"That there shall be charged upon the goods covered by this resolution when imported from countries having a depreciated rate of exchange relative to the mintage value of the gold or silver monetary units of such countries as compared with the British sovereign, a special duty is set forth in the schedule hereto provided that goods having their origin in such countries and sent to New Zealand by way of any intermediate country shall be assessed for duty as if directly exported from the country of origin, unless the collector is satisfied that the current domestic value in such intermediate country yields a duty equal to or greater than that which would be chargeable if the same had been directly exported from the country of origin, and further provided that the said duty shall only be charged where the said goods are subject to a preferential surtax in favor of British Dominions, or where they are held by the Minister to enter into competition with an industry established in New Zealand.

"For the purpose of this resolution, the rates of exchange as applied to the valuation of any goods may either be accepted at the rate of conversion shown upon any invoice which has been declared to as true and correct, or they may be according to a scale to be fixed by the Minister from time to time. Further provided that the special duty shall not be charged in respect of goods for which a special license or permit to import has been granted prior to the date of this resolution."

The maximum special or dumping duty is 25% ad valorem.

The full text of the new New Zealand Tariff is on file in the Tariff Department of the Association, and any information thereon is available for our members.

Marking of Country of Origin on Imported Goods.

The marking required on goods imported after 31st December was substantially modified by new Customs regulations issued on December 19.

1. The following imported goods will not be required to be marked with any indication of country of origin, viz:

Goods in a crude, raw or rough state, or goods which are not intended for sale to the consumer in the condition imported, but which are merely for use in the manufacture, construction or repair of articles in Canada, this not to apply, however, to goods elsewhere specifically provided for in these regulations. (Section 18).

2. Cloth and material in the web or roll is required to be marked with an indication of the country of origin either on the piece ticket or on the band or label or on one end of the web or roll. Any one of the foregoing forms of marking will comply with the new regulations. (Section 16 (a)).

3. Wrappers, labels or containers imported separately or empty are required to be marked except containers which are imported to be filled with Canadian produce and exported. The regulation is as follows:

"Imported containers, labels or wrappers intended to be filled with or used upon domestic products are to be marked as required by the Act, but in order to avoid the possibility of origin other than Canadian being imputed to domestic products sold in such containers, labels or wrappers because of the marking of the latter, the words 'container,' 'label' or 'wrapper,' together with the indication of the country of origin as required by the regulations, shall be used." (Section 11).

"Provided that containers imported to be filled with Canadian produce and exported may be admitted without being marked with the country of origin, conditional on the importer certifying on the face of the entry for consumption that such containers are for use in the preparation of goods for exportation."

4. NOTE (IMPORTANT):—The name of the manufacturer or his trademark, accompanied by the name of the country or a place in a Province, State or other division of a country where the goods have been manufactured or produced will be accepted as sufficient indication of the country of origin. (Section 13).

5. Section 10 of the regulations has been amended so as to read as follows:

"Where articles themselves incapable of being marked without injury are imported in bands, wrappers or containers, or on cores, or spools, such bands, wrappers containers, cores or spools shall be marked so as to indicate the country of origin, unless such articles are of a class or kind not made or produced in Canada, in which case no marking is required."

Example:—Tea, coffee, raisins and other food products not grown or produced in Canada will be exempt from the marking requirements by virtue of this section as amended.

All rulings of the Department of Customs and Excise in connection with the marking of imported goods with an indication of the country of origin which are inconsistent with the amended regulations are repealed.

Collectors of Customs and other officers concerned have been instructed by the Department of Customs and Excise to exercise reasonable discretion in the enforcement of the Regulations governing the Marking of Imported Goods with an Indication of the Country of Origin so as not to impose undue restrictions on importers and thereby cause unnecessary inconvenience and irritation.

The Department of Customs and Excise states it is expected that the examination usually required in connection with imported goods will be sufficient to enable an officer to determine whether the goods have been marked in accordance with the provisions of the regulations, so that there may be no undue delay in the release of the goods for delivery after payment of duty.

In brief, sections 10, 11, 13, 16 (a), and 18 of the regulations have been amended, and sections 12, 17 (c), 17 (e), and 19 have been cancelled.

The Revised Regulations

1. This law applies to "all goods imported into Canada" and consequently includes goods originating in the United Kingdom, British Colonies and British Possessions.

2. The country of origin of a manufactured article may be the country in which the article has been finished by a substantial amount of labor amounting to not less than one-fourth the cost of production of such article in condition imported.

3. Goods entered for immediate exportation or in transit through Canada are not required to be marked.

4. When imported goods are found to be not legally marked, the Appraiser will note the fact on the invoice and the additional duty shall be levied accordingly.

5. The Appraiser will report all articles (and packages as hereinafter provided for) not properly marked to the Collector who will notify the importer to re-deliver the unexamined packages or to arrange to mark the same and their contents under Customs supervision.

6. The importer may be permitted to mark examined packages and their contents in Customs warehouse, or arrange for the marking of same under Customs supervision on the premises of importer.

7. Whether the marking found on goods in condition imported is as nearly indelible and permanent as the nature of the goods will permit is a question of fact to be determined in each instance by the Collector, subject to the decision of the Commissioner of Customs and Excise.

8. If the importer fails to mark goods when upon to do so by the Collector, the Collector may require the same to be exported, and in default thereof, the goods shall be treated as unclaimed dating from time of importation, and if sold, must be sold on condition

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that they be marked by the purchaser under Customs supervision.

9. Goods not susceptible of permanent marking may be stamped or labelled for purposes of delivery.

It will be found that while certain kinds of goods as for example, chinaware and porcelain are capable of being permanently and indelibly marked in the process of manufacture, it is commercially impracticable to so mark them afterwards.

Goods of this class, if not so indelibly marked in condition imported, will be subject to the additional duty as provided, but may be released upon being marked by the importer in a manner as nearly permanent or indelible as the nature of the article will permit, as for example, by gummed labels or rubber stamp.

10. Where articles themselves incapable of being marked without injury are imported in bands, wrappers, or containers, or on cores or spools such bands, wrappers, containers, cores or spools shall be marked so as to indicate the country of origin, unless such articles are of a class or kind not made or produced in Canada, in which case no marking is required.

11. Imported containers, labels or wrappers intended to be filled with or used upon domestic products are to be marked as required by the Act, but in order to avoid the possibility or origin other than Canadian being imputed to domestic products sold in such imported containers, labels or wrappers because of the marking of the latter, the words "Container," "Label" or "Wrapper," together with the indication of the country of origin as required by the regulations, shall be used.

It will not constitute a non-compliance with the Act, however, so as to involve the levy of the additional duty, if the word "Container" "Label" or "Wrapper" as provided in the preceding paragraph be not used in the marking of the goods as imported, but before release from Customs, this additional marking will require to be done.

Provided that containers imported to be filled with Canadian Produce and exported may be admitted without being marked with the country of origin, conditional on the importer certifying on the face of the entry for consumption that such containers are for use in the preparation of goods for exportation.

12. Cancelled.

13. The name of a manufacturer or his trade mark accompanied by the name of the country or a place in a Province, State or other division of a country where the goods have been manufactured or produced will be accepted as sufficient indication of the country of origin.

14. Fabric gloves are in the opinion of the Department capable of being marked without injury either by stamping or by means of gummed labels on the inside of the wrist, where the brand or trade mark usually appears.

15. Hosiery may be so marked upon the foot where the brand or trade mark usually appears.

16. (a) Cloth and material in the web or roll shall be marked with an indication of the country of origin on the piece ticket, label or band, or on one end of each web or roll.

(b) Carpets shall be marked with an indication of the country of origin by means of a protruding ticket attached to the edge of each roll at the centre.

(c) Linoleums and oilcloths shall be marked with an indication of the country of origin on one end of each roll, either by stamping, stencilling or adhesive label.

17. (a) With respect to watch dials and watch movements imported attached as one article, it will be deemed to be sufficient compliance with the regulations if the required indication of the country of origin appears on the movement only.

(b) With respect to watches imported complete, it will be deemed to be sufficient compliance with the regulations if the movement and the case are each separately marked with the required indication of the country of origin.

(c) Cancelled.

(d) Watches and watch movements bona fide ordered prior to October 1, 1921, may be admitted marked as formerly, without regard to this law or the regulations thereunder, provided they are imported previous to July 1, 1922.

18. The following goods will not be required to be marked with the indication of country of origin, viz:—

Goods in a crude, raw, or rough state, or goods which are not intended for sale to the consumer in the condition imported, but which are merely for use in the manufacture, construction or repair of articles in Canada. This not to apply, however, to goods elsewhere specifically provided for in these regulations.

Provided that on every entry at Customs of goods as described in this Section a statement shall be placed by the importer certifying to facts sufficient to classify the importation within the provisions of this section.

19. Cancelled.

20. Goods bona fide ordered prior to the 1st October, 1921, shall not be subject to the additional duty of 10 per centum ad valorem to be levied on the value for duty purposes, provided such goods are imported into Canada prior to the 1st July, 1922, but such goods shall not be released from Customs possession until they have been marked, stamped, branded or labelled with an indication of the country of origin as required by the provisions of the Act, under Customs supervision at the expense of the importer.

Collection of Sales Tax from Firms going into liquidation and from purchasers who refuse to pay the tax:

Until recently the Department of Customs and Excise held that taxes due by a firm going into liquidation in respect to goods purchased by such firms constituted a debt to the Crown and as such were entitled to rank as preferred claims against the estate of the insolvent. In all cases brought to their attention the Department would notify the assignee or liquidator that the amount of sales tax was a preferred claim and was to be paid in the manner designated in the Act, that is to say —to the manufacturer from whom the goods had been purchased.

The Department of Customs and Excise now takes the stand that, if the manufacturer has in the meantime paid the amount of sales tax over to the Crown, the Department is not concerned in the collection of the tax from the purchaser.

Also the Department of Customs and Excise has decided not to take any action to enforce payment by purchasers who decline to pay the sales tax, if the manufacturer has paid over the tax to the Government. Up to a few months ago the Department, on being notified of default by the purchaser, would write the purchaser advising him that he was liable for the tax and that in the event of his failing to pay the tax he was liable to the penalties provided in the law. This course usually resulted in the delinquent purchasers paying the tax. The Department now states that if they have received the amount of the tax from the manufacturer they are not interested in the collection from the purchaser and that it is a matter for adjustment between the vendor and the purchaser.

The matter has been taken up with the Department of Customs and Excise and they have been asked to revert to the former practice, but the Department States that further consideration of the matter must remain in abeyance until after the new Minister of Customs is appointed.

Board of Customs Decisions

Motion picture films for use in "Moviegraphs" for home entertainment,—Declared that positive motion picture films, per sample 1⅛ inches in width and over, are dutiable under tariff item No. 657 (a) at 3 cents per linear foot under the general tariff.

Declared that Angora Yarn, per sample, made from the hair, or fur, of the Angora rabbit, is properly dutiable under tariff item 711 at the rate of 17½ per cent. under the General Tariff.

Sales Tax Decisions

Referring to the ruling on bulk oysters in the November issue of INDUSTRIAL CANADA, the Department of Customs and Excise states that ordinary bulk oysters in the original state, not prepared in any manner, are exempt from sales tax, irrespective of the container.

Rentals: The Department of Customs and Excise state that rentals paid for the use of an article or privilege are subject to the payment of sales tax,—rentals being regarded as a provisional sale.

Royalties: Under a ruling of the Department of Customs and Excise royalties are declared subject to sales tax, effective from September 1st, 1921.

Estates in Liquidation: Where a purchaser becomes insolvent, when owing taxes on purchases made by him, such unpaid taxes constitute a preferred claim against the insolvent estate, provided the manufacturer has not, in the meantime, paid the amount of the tax to the Government in his monthly returns. Where this condition obtains, a separate claim should be filed by the manufacturer with the assignee or liquidator covering the sales tax by the person or firm who has become insolvent.

If, however, the manufacturer has in the meantime remitted the amount of the tax to the Crown, the Department of Customs and Excise states the Crown is no longer an interested party, and that the manufacturer is not entitled to claim priority in respect of unpaid sales tax. In the opinion of the Department of Customs and Excise the manufacturer's claim for sales tax is only entitled to rank on the same basis as his claim for the goods themselves.

Where the manufacturer has remitted the amount of the tax to the Government, and the purchaser subsequently becomes insolvent before paying the manufacturer, the Department of Customs and Excise will not grant a refund to the manufacturer of the tax so paid by him.

If, however, the tax has not been paid in the meantime to the Government by the manufacturer, the latter should notify the Department of Customs and Excise, that the purchaser has become insolvent and that the tax is still outstanding, both as between the purchaser and the manufacturer and as between the manufacturer and the Crown.

The rulings set forth on pages 13 and 14 of our Excise Tax Pamphlet, Circular 318, under the heading—"Estates in Liquidation," should read subject to the foregoing.

Prepaid Freight and Freight Allowance. Where a manufacturer sells goods "freight prepaid" or at a delivered price to destination with an allowance for freight, and actually deducts the amount of the freight prepaid or allowed from the face of the invoice, sales tax is chargeable on the net amount after the deduction of the freight.

Also where the goods are shipped forward, freight collect, and the purchaser is entitled to deduct and does deduct from the invoice the amount of freight he has paid, he should deduct a proportionate amount of tax before



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remitting to the vendor. The vendor in turn may take credit on his next succeeding tax returns for the amount of the tax on the freight debited against him by the purchaser.

Also where the vendor prepays the freight and adds the amount of same to his invoice to the customs, the sales tax is only chargeable on the amount invoiced to the customer for the goods.

Provincial Institutions: The following list of institutions should be added to the list in Appendix D, page 21, of the Association's Excise Tax Pamphlet. It is to be noted that the exemption from sales tax only applies in respect of purchases made by such institutions for their sole use and not for re-sale, and a certificate to this effect should be obtained by the vendor manufacturer:

Department of Roads—Province of Ontario.

Ontario Government Dispensaries.

Board of License Commissioners of Ontario.

Ontario Government Northern Development Branch, West Fort William.

Department of Railways, Province of Quebec.

Department of Public Works, Province of Quebec. Saskatchewan Mental Hospital, Weyburn, Sask.

Departmental Rulings

"Meloine," a sweetened filler for ice cream, manufactured by B. Heller & Company, Chicago, rated dutiable under tariff item No. 141 at ½ cent per pound and 35% under general tariff.

Dumping duty is not applicable on account of a bona fide cash discount as allowed to purchasers generally in the home market of the exporter.

Moving Picture Films entitled to entry under tariff item No. 696 may be appraised without regard to appraisers' Bulletin No. 780.

"Sil-O-Cel" in brick form, from the Celite Products Company, Los Angeles, California, rated under tariff item 711, at 17½ per cent under the general tariff.

"Nokorode Soldering Salts," per sample submitted, manufactured by the M. W. Dunton Company, Providence, R.I., rated under tariff item 711 at 17½ per cent. under the general tariff.

Until otherwise notified, engines for ships' equipment may be classed as follows:

Marine Engines, made in Canada.

Kerosene and gasoline engines—up to 60 H.P. inclusive.

Semi-Diesel Engines—up to 20. H.P. inclusive.

Diesel engines—75 to 150 H.P. inclusive.

Marine Engines, not made in Canada.

Semi-Diesel engines—25 H.P. and over.

Diesel engines—50 H.P. and under, and 200 H.P. and over.

Stationary Engines, made in Canada.

Kerosene and gasoline engines—up to 50 H.P. inclusive.

Semi-Diesel engines—to 25 H.P. inclusive.

Diesel engines—75 to 150 H.P. inclusive.

Accident Compensation in 1921

There were 45,191 accidents reported to the Ontario Workmen's Compensation Board in 1921, as against 54,851 in 1920, a decrease of 9,660. The fatal accidents decreased from 452 to 386. The daily average was 151 accidents reported in 1921, as against 183 in 1920.

The compensation awarded during 1921 amounted to $5,526,519.60, as against $7,076,439.59 during 1920, a decrease of $1,549,919.99. The high figures for 1920 were partly owing to the retroactive increase in death pensions under the amendments of that year.

The amount paid by the Board for medical aid during 1921 was $662,793.89, as against $703,705.66 in 1920. This made the total benefits awarded during 1921 $6,189,313.49, as against a total of $7,780,145.25 in 1920.

The average daily number of cheques issued by the Board during the year was 485, and the benefits awarded averaged $20,631 per day.

Labor Conditions of United States Railroads

The following wage scale becomes effective throughout the New York, New Haven, and Harford R. R. on the 16th of January:—

	per hour		per hour
Porters	.35	Mechanics	.66
Freight handlers	.35	Helpers	.40
Common labour	.32		

Crew-callers (first year) ..... $1.75 a day
Crew-callers (second year) ..... 2.00 a day

The American Railroads have announced that they will apply to the Railroad Labour Board for additional wage reductions ranging from 10% to 30% and aggregated to about $200,000,000 annually. It is expected that the Railroad unions, especially shop crafts, will ask for advances amounting to about $100,000,000 annually. Newspaper and public opinion generally is that resistance to the reduction will not be carried to the point of a strike.

A cable from Germany about the 20th December announced a movement there to prepare for industrial depression and wide unemployment in the Spring. Large textile concerns are urging that the Labour Ministry should apply to the Reichstag for one billion marks to be used in maintaining production during the period of expectant unemployment next Spring.



The Canadian Bank of Commerce

Reports presented at the 55th Annual Meeting showed a satisfactory increase in percentage of quick assets to liabilities, though a slight reduction in profits due to general business contraction. A note of confidence expressed in progress toward normal conditions in Canada.

Sir Edmund Walker, the President, occupied the chair and the Directors' Report for the year ending 30th November, 1921, was submitted, including the Profit and Loss Statement as follows:—

The balance at credit of Profit and Loss Account, brought forward from last year, was	$1,783,979 37
The net profits for the year ending 30th November, after providing for all bad and doubtful debts, were	3,116,136 72
	$4,900,116 09

This has been appropriated as follows:—

Dividends at twelve per cent. per annum and bonus of one per cent.	$1,950,000 00
Dominion and Provincial Government taxes and tax on bank note circulation	325,000 00
Written off Bank Premises	500,000 00
Transferred to Pension Fund	178,370 69
Balance carried forward	$1,946,745 40
	$4,900,116 09

The Chairman requested the General Manager to address the shareholders.

General Manager's Address.

The contraction in business, to which I referred when addressing you a year ago, has continued unabated down to the present time, indeed it increased in severity throughout the greater part of the year just closed. It has been a time of testing for the financial policies of all business, and particularly of banks, searching out the weak spots and revealing the true outcome of plans adopted under much brighter auspices. It has been a source of much gratification to us to find that policies adopted by this Bank after full consideration, with a view to warding off the evil effects of just such a period as the present, have proved as efficacious as we had hoped, enabling us to view the present with equanimity, and to look forward to the future with confidence.

A Satisfactory Showing.

The net profits of the Bank during the year amounted to $3,116,130, or about $190,000 less than a year ago. Considering the difficulties with which the situation has been beset, and the steady shrinkage in the volume of all business, resulting in our case in a smaller amount of loans on which to earn a profit, we venture to think that you will regard this as a satisfactory showing. We have been able to provide out of it tne regular dividend of twelve per cent., and a bonus of one per cent. paid last December. We have set aside $325,000 for the very heavy burden of taxation levied by the various Governments under whose rule we transact business, $500,000 for Bank Premises Account, $178,370 for the Officers' Pension Fund, and finally carry forward into next year's accounts, at the credit of Profit and Loss, a balance of $1,946,745, or $162,766 more than a year ago. The writing off of $500,000 from Bank Premises Account is in pursuance of our expressed policy of carrying our premises on our books at approximately 50 per cent. of their cost. We referred last year to having been able to acquire premises for several of our branches in the West Indies and South America on favorable terms, and the purchase price of these is reflected in this year's statement, accounting for the principal part of the increase in the item of Bank Premises in our balance sheet.

Delay in Building.

We are much in need of a new building for the Head Office, for which, as you know, the necessary additional land adjoining this building has already been acquired. The existing buildings have been made to house the various departments of the Head Office and the Toronto branch to the best advantage we could arrange, but the limit of adaptibility in this respect has about been reached, and the scattered and more or less haphazard arrangements with which we are obliged to be satisfied are not conducive to either efficiency or economy. The excessive cost of building operations has made it impossible for us up to the present time to embark on an operation of such magnitude as is necessary to meet our requirements. In this connection it may be pointed out that in all parts of Canada there is a large programme of building in prospect, the carrying out of which only awaits more stable conditions in the form of lower prices for materials and labor, and a return of labor efficiency.

Influence of Lower Prices.

The decrease of somewhat over seven million dollars in notes of the Bank in circulation, which now amount to $23,-[illegible] is, of course, the direct result of business. Owing to lower prices a much smaller amount of money is required to handle a given quantity of goods than a year ago. The same influences have had their effect on deposits, which now stand at $[illegible], of which about 254 millions bear interest, the balance of 99 million being of non-interest-bearing. I have already mentioned the decrease in the Bank's loans, which is a natural accompaniment of the decrease in deposits and circulation. The item of Bills Payable shows an increase, standing now at $2,758,126, or somewhat more than double the figures of a year ago. This reflects the return of more normal conditions in the principal money centres abroad, and is also in a measure a tribute to the standing of this Bank in the foreign exchange markets. Acceptances under Letters of Credit show a large decrease, owing to the inactivity of foreign trade at the present time.

Strong Reserves.

Cash on hand and in the Central Gold Reserves, that is, the Bank's holdings of gold and silver coin and Dominion notes, stands at $65,162,871, and represents an increase in proportion to our present liabilities by way of deposits and note issue, from 15.9 per cent. to 17.3 per cent. There has been a similar increase in the proportion between "quick assets" and these liabilities, from 48 per cent. a year ago to 49 per cent. at the close of November last. We have thought it well to maintain ample reserves at all times under present unsettled conditions. There are several important changes in the items comprised in the term "quick assets." Thus, the amount of cheques on other banks held at the end of November shows a large decrease as compared with the figures of the previous year. The reasons for this are, of course, the general inactivity of business and lower prices. There have been some considerable changes in the Government securities we hold. During the year the British Government continued to reduce its indebtedness to the Canadian banks by payment of the short term securities which the latter hold, and we took the opportunity of investing a corresponding sum, at the favorable rates which prevailed in the bond market, in the securities issued by our various Provincial Governments. During the year we paid off all our borrowings from the Dominion Government under the Finance Act. Loans and Discounts in Canada, other than call and short loans, amounted to $206,588,328, and thosse elsewhere to $23,334,479. We still hold an outstanding position in the first of these two items, which represents roughly the measure of service rendered to the commercial and industrial business of Canada, and to its agricultural interests. There has been an increase in Overdue Debts, but it is small when compared with the total volume of our business and when the conditions that prevail are taken into consideration. We have provided amply for all possible loss, and believe the figures at which this asset stands in our books to be undoubtedly conservative.

Sound Commercial Loans.

Our total assets show a decrease of between 10 and 11 per cent., as compared with the figures of a year ago, which is more than accounted for by the decrease in commodity prices. At the end of November, 1920, the total assets of the Bank stood at $480,760,000, and at the end of August last, nine months later, they had been reduced to $378,814,000, that is by This was not caused by any set policy of contraction or enforced liquidation, but simply by the natural, orderly and voluntary payments of debts by our customers in the face of the depressed business situation. Naturally, it affected our earning power for the time being, and has resulted in lower profits for the year, but we look upon it as most striking evidence as to the soundness of our commercial loans and as to the liquid position of our other assets. It shows, too, that the business of the Bank is well diversified and not bound up with the fortunes of any one industry. You have noticed, however, from the balance sheet in your hands that the total assets of the Bank as at November 30th last amounted to over $428,000,000. This increase is owing largely to our activities in connection with the movement of the crop of last autumn.

In some quarters it has been stated that too large a proportion of commercial loans was the cause of recent banking difficulties. More recent information would seem to indicate that these difficulties arose from advances to brokers and others interested in unsound enterprises. This Bank will resolutely continue to set its face against fostering such enterprises, while carefully avoiding any discrimination against legitimate business.

Careful Administration.

There has recently been some discussion in the public press of the reliability of the annual statements published by the banks and of the auditor's certificates attached to them. I should like to lay frankly before you the precautions with which we have surrounded the administration of the trust committed to our care, of which that part which bears the ultimate risk is the money which you as shareholders have invested in the business. I wish to say emphatically that the safety of your investment does not depend upon my own unaided judgment, nor upon that of any other single officer of this institution. We have departments at Toronto, Winnipeg, Calgary, Vancouver, Sherbrooke and Halifax for the purpose of supervising the loans of the Bank. These departments are headed by senior officers of proved judgment and experience in lending money, and they are assisted in their work by some of the best and brightest of the younger men on our staff, specially selected for the purpose. The training these men receive in these departments in the handling of credits is looked upon as offering the best opportunity this Bank can give for future promotion and usefulness. Under the personal guidance and oversight of the head of the department, they check and scrutinize the judgment exercised by the various local managers in making loans. In addition, all loans or credits over a certain sum have to be passed upon by the Credit Department at Head Office and by your Board of Directors. Every year a statement signed by three of the senior officers of the Head Office in charge of credits is submitted to the Board, certifying that every credit which should come before the Board, has been submitted to it.

Ample Provision.

The procedure I have described is that which is applied to all the current and active business of the Bank. The comparatively small number of accounts in connection with which there are slow or dragging advances, are subject to the additional test of an annual review by the Superintendents and the Chief Inspector. This takes place in tthe autumn of each year, and whenever in the judgment of these officers there is doubt as to the ultimate collection of the face amount of any debt, full provision for the estimated loss is made, either by writing down the debt in the books or by setting aside ample provision for it in a contingent account. The same procedure is applied to all the miscellaneous assets of the Bank, such as bonds and stocks held as investments, or other items which have come into its possession as security for debts incurred to it. The provision which is thus made for bad debts is so ample that every year a certain amount is recovered from debts previously written off our books, and we have a special organization in the Head Office to look after these written-off debts and to see that nothing is left undone which is necessary to protect the Bank's interest in them. I should like to repeat what I drew attention to at the beginning of my address to-day, that the policies

ern its methods of lending money, with a view to protecting it from bad debts, especially under such adverse circumstances as we have passed through during the past year, have proved most effectual, so that the ratio of bad debts to total loans over a series of years shows a marked decrease.

A Thorough Audit.

As to the auditors' certificate, the auditors whom you select each year are chartered accountants belonging to well-known fims of established reputation. They are voted each year at these annual meetings a considerable sum for their services, namely, $20,000, and undoubtedly they put forth their best endeavors in the discharge of their duties. They visit a number of the principal offices of the Bank, and in addition to verifying the accuracy of the records, and the physical existence of the cash and securities held as investments or as collateral for loans, they carefully examine the annual review of all slow or dragging loans and investments, of which I have spoken, and for their own satisfaction are placed in possession of the evidence upon which our estimate of the value of such assets is based. If this does not satisfy them, they are at liberty to make such independent investigation as their judgment may dictate. In our opinion their work is well and thoroughly done.

As a result of the general contraction of business, it has become almost a problem to provide employment for the large clerical staff built up in more active times. We have found it necessary to release a number of our temporary employees, both men and women, although in many cases this step was taken only with great reluctance. It had, however, become incumbent on us, not merely on account of existing conditions, but also to accelerate the training of our junior officers, many of whom had been retained on purely junior duties for an undue length of time.

Foreign Exchange.

The course of the foreign exchanges has again been of great interest, many violent fluctuations having taken place on various occasions. The leading European exchanges have been particularly sensitive to political happenings, and such matters as the negotiations of the Reparations Committee of the Allies with Germany and the Disarmament Conference at Washington have exercised a marked effect on rates. The year 1920 closed with demand sterling selling as low at 352½ in New York. Throughout the early months of 1921 there was a more or less steady rise until the rate crossed $4 in May. Early in June there was a sharp drop in rates, caused by persistent foreign selling in New York, and the German reparations payment. This fall continued during July, carrying the rate down to 357⅝, or almost as low as at the close of the previous year. During August a steady climb began, which reached the level of 424, a gain of almost 72 cents for the year, or more than half the way back to par. To this improvement a number of causes have doubtless contributed. The fall in the prices of foods and of raw materials has materially aided the rise by diminishing the money value of Great Britain's necessary imports. Payment of part of her indebtedness to the United States and the evidences of improvement in her financial and economic position have been other factors.

Our Dollar in United States.

The premium for United States funds in Canada dropped sharply during January last, falling from 18 to 10 per cent., and this was followed by a reaction to 15½ per cent. in February. During the next seven months, March to September, inclusive, the range was much narrower, the premium fluctuating between 10 and 15 per cent. In October the rate fell further to 8½ per cent., and after a slight reaction in November to as high as 10 per cent., another decided drop occurred in December, when quotations fell below 5 per cent. The improvement in the early Autumn was only natural in view of the volume of exports of Canadian grain at that time of the year, but the movement in December was somewhat unexpected. The explanation lies no doubt, to a large extent, in the cumulative effect of very large sales of bonds in the New York market by Canadian provinces and municipalities, facilitated by the receptive state of the bond market in the United States during the last part of the year. These borrowings, while they temporarily enhance the value of the Canadian dollar in the United States, only add to the yearly interest bill of Canada—already very large—and there is nothing in the situation which would give us reasonable cause to believe that any improvement in the exchange value of our currency brought about in this way will prove permanent. We should like to direct the attention of any interested to the discussion of the subject in the current number of our Monthly Commercial Letter.

A Difficult Year.

In conclusion, I may say that the year throught which we have just passed was undoubtedly a difficult one. Irregularities here and there in the progress of deflation show that the process is not yet fully completed. The burden of taxation is a heavy one, made unduly so by inequitable distribution. It would be well if our Governments would direct taxation more at what people are spending and less at what they are saving. It must be remembered that high municipal taxes are one of the influences that keep up rents and retail prices, just as taxes on profits keep up the prices of manufactured goods. The lack of capital accumulations and the high level of wages also function in the manner of taxes on employment, tending to increase the unemployment which has been so prevalent. In these and other ways the return of prosperity is being held back.

Improving Prospects.

Yet the position has undoubtedly improved in many respects. The doubt as to the future so widespread a year ago has largely disappeared. The stocks of goods produced at a high cost have been steadily reduced by consumption, even if often disposed of at a loss. The problem of production at lower costs, which for a time seemed so baffling appears now in a fair way to be solved. The soil and other natural resources of Canada are as ready as ever to respond to the efforts of her people. If business seems at present to be more or less in a condition of suspended animation, any change which takes place must surely be for the better, and at any moment it may awake to new life and prosperity. Granted a favorable harvest in the coming year, we may confidently look for a steady return to more normal conditions.

In moving the adoption of the report, the President spoke as follows:

President's Address.

When the high tide of prices and of financial inflation began to ebb, the keenest observer seeking to estimate the extent of the decline must have failed to do so. Ever since the vast network of modern trade, based so largely on steam, electricity and credit, made the world almost an industrial whole, no such test of its power to resist disaster has occurred.

A Period of Readjustment.

The losses ascertained on the readjustment of balance sheets have been so great that many concerns of world-wide importance will require some years to regain what had been the most favorable position in their experience, and the dividends on many first-class stocks have been lessened or actually stopped for the moment. Whether we have seen the worst or not, it is idle to guess; but thus far these extraordinary adjustments have been made with so few failures, and with so little of anything approaching panic, that we have cause for some surprise and much thankfulness. The General Manager has already told you of our own good fortune in steering through a difficult time.

Our Foreign Trade.

Tuning to our own foreign trade and having in mind the large figures caused by the war, which in 1918 reached a total of two and a half billions of dollars, we find at he close of our fiscal year in March last little change involume, but much change in detail, and a vast change in the half year ending September. For the fiscal year our total foreign trade was $2,450,587,000, but while in 1918 we had a surplus of $623,647,000 in exports over imports, in 1921 we actually imported to the value of $29,730,000 more than we exported.

For the six months ending September our foreign trade was only $721 626 000 as compared witth $1,274,878,000 in 1920. The great inrush of imports which in the last half of the year ending March had so completely changed our fiscal position, lessened rapidly during the half year, but nevertheless there was a balance of $35,835,000 against us. When we compare the figures for these six months in 1920 and 1921, we find an almost unbroken series of decreases in the various items of both imports and exports, the imports showing a decrease of nearly fifty per cent., and the exports one of about forty per cent.

When we make a comparison for the twelve months ending September, we get a clearer light as to the great change which has taken place. For the twelve months ending September, 1920, our foreign trade was over two and a half billions, while at the end of September, 1921, it had fallen to $1,897,335,000. We had, however, turned a balance of 80 millions of excess imports into a balance in our favor of 85 millions. Although the situation has changed so materially, it is still worth while to analyze the figures for the fiscal year.

A Great Total of Imports.

We learn that during this period of reckless buying we imported under eight main headings 209 millions in value more than in the preceding year, and under one heading, 33 millions less. In the details there are many decreases but these are overbalanced by such increases as: Distilled beverages, 25 millions; sugar 12 millions; cotton and other textiles, 12 millions; wood and wood products and paper, 14 millions; iron and its products, 59 millions; coal, 55 millions; petroleum and its products, 19 millions; and chemicals, 6 millions. The most important decrease is in animals and their products, 33 millions. Nor can we find any warrant from our exports for such excessive imports. It is true we maintained the total of only 75 millions less than for the previous year, but the details show the following decreases in value: Flour, 32 millions; sugar, 15 millions; cattle, 23 millions; furs, hides, etc., 35 millions; beef, 10 millions; bacon, etc., 38 millions; and ships, 33 millions. Our excessive imports were only possible because we exported more grains to the extent of 123 millions, and more wood, wood products, etc., to the extent of 70 millions. Of the great total of imports, valued at a billion and a quarter of dollars, we should make a very large proportion ourselves, and if we are to prosper and pay our debts abroad we must plan to do so in future. Any other course will be ruinous to Canada.

Decrease in Total Trade.

Our total trade with Great Britain was $528,171,000, with purchases of $213,944,000, much the largest on record, but with sales of only $314,226,000, the smallest since 1915, leaving a surplus in our favor of only $100,281,000. Our total trade with the United States was $1,417,296,000. The imports were $856,613,000, the largest on record; the exports $560,683,000, also the largest, and the balance against us, $295,930,000, a trifle less than for the previous year. We are certainly improving the proportions of our trade with the United States; but we have a long way to go before an ideal condition is reached, and such measures as the Fordney tariff bill show conclusively that we must not expect any help from our neighbors towards making the two sides of our trading account more nearly equal in money value.

Farm Products at Low Prices

The field crops of Canada for 1921 are estimated in value by the Dominion Bureau of Statistics at $1,017,675,000, as compared with revised figures for 1920 of $1,455,244,000. While the yield of most agricultural products was less than in 1920, the loss is mainly in the price. Wheat is said to have averaged only 11 cents over the pre-war average, while oats and barley were sold at less than pre-war prices. With wheat at an average for all Canada of 86 cents, as compared with $1.62, oats 37 cents instead of 53, barley 47 instead of 83, and almost every other farm product in somewhat similar proportion, the present position of the farmer is obvious. In hay the poor result was due to the lowest yield per acre on record and not to the price.

The Fordney Bill.

These hard facts have brought about a situation rare in Canada for many years, but they do not constitute the whole of the farmer's troubles arising from the world-wide adjustment of prices. The money loss from the fall in the price of cattle, whether the farmer sold his animals or still owns them, has been more serious and disturbing than in the case of cereals. Unfortunately we have no statistics upon which to make such a comparison as in the case of our field crops. Europe fixes the price for our grain and cattle, but the United States has been a buyer under certain conditions, and the possibility of selling there a surplus of cattle not immediately required by Europe, has been a protection against a loss in price which will affect all of our cattle if this additional market does not exist. The Fordney bill closes that additional market to us for cattle. For the year ending in March last the exports from Canada to the United States included commodities affected by the bill to the value of 168 millions of dollars, and to the extent of about 32 millions, these consisted of cattle and their products. While almost every country in the world

is at the present time increasing its tariff in the effort to save its own industries, a creditor nation desiring to sell the products of its industries abroad and be paid for them, must have regard to the fact that payment can only be made in commodities. If the Fordney tariff remains in force, our power to buy from the United States will be curtailed accordingly, and we must in self-protection put every possible obstacle in the way of our people buying from that country the commodities for which we are thus rendered unable to pay.

War Obligations.

We are beginning to understand what pensions to our soldiers and to their dependents will mean. For the fiscal year ending in March last we paid for all kinds of pensions $37,000,000, as compared with $24,000,000 in the previous fiscal year. The figures are swollen by the settlements being made with disability pensioners, who are allowed to accept final payments instead of monthly pensions. During the year as many as 18,261 disability pensioners accepted final payment, causing an expenditure of $7,307,000. At a later date, the end of October last, there were in force 48,597 disability pensions. The pensioners, with their wives, children, mothers, fathers, brothers and sisters, numbered 89,689 souls, involving an annual liability of $17,585,000, and there were in force 19,480 dependent pensions, representing allowances to relatives of deceased soldiers numbering 36,256 persons, and involving an annual liability of $13,062,000. The total annual liability in October last was a little over 30 millions of dollars.

The President then referred to the establishment of a clearing house in Canada for the settlement of pre-war debts between German and Canadian citizens, and of the rights to property in each country claimed by citizens of the other. He pointed out the immense amount of work involved in the settlement of these claims, and gave some statistics regarding them. Great credit is due to the Secretary of State for Canada and to his staff for the progress already made.

Commercial Letter.

During the year our Monthly Commercial Letter has endeavored to give to our customers correspondents and the press, information as to finance, home and foreign trade, the process of deflation, the details of production, and the markets and prices of many national products, together with facts regarding national expenditures, immigration, etc. These are, as far as possible, accompanied by graphs calculated to help in a rapid understanding of the subject, and we have now added an index of wholesale prices, which will be continued in graphic form from month to month.

Immigration.

Passing to the subject of immigration, the President pointed out the immense importance to the future prosperity of Canada of a sound policy of land settlement. He drew a parallel between conditions at the time of the completion of the Canadian Pacific Railway, when the railway mileage in Canada was even more in advance of the country's needs than at the present day. He pointed out how the problem has subsequently been solved and emphasized the importance of suitable immigration, properly directed to the land. He referred to past mistakes in land settlement work, and drew attention to the success achieved by the Soldiers' Settlement Board and other bodies of a somewhat similar character, suggesting that a solution of our present problem might be found along these lines.

The Allied Debt.

We have referred earlier to the financial condition of Europe. The need which takes precedence of all others is that budgets must be made to balance. Only Great Britain and Denmark have as yet accomplished this. Nations can always effect this, however, when they realize that the only other course means an absolute stoppage of the power to spend as soon as fiat money ceases to have any purchasing value. The next is to rearrange each national debt so that payments over a series of years, which will eventually extinguish the debt, may be possible, and that the paper currency and other floating obligations may also be reduced, not at too fast a rate, but one which looks forward to a resumption of the gold basis at some future time. When it comes to arranging the amortization, regard must be had mainly to the ability of each nation to pay. A nation is but an aggregation of individuals and what it can pay especially to foreign creditors, is what it can save while living in reasonable comfort. In our opinion, it is most desirable that any settlement shall consist of a series of annual payments, so that from the beginning only the annual sum shall hang over the paying nation as its problem. The constant facing of a vast capital sum of debt has a most depressing effect on the debtor.

Debts to United States.

It is not for us to offer advice to the United States, yet we cannot fail to express surprise at the suggestion that the powers owing money to the United States should pay what they owe in 25 years with 5 per cent. interest. We do not believe that the Allied war debts should be cancelled entirely, although they are not ordinary debts, but represent the cost of commodities, at two or more times the ordinary price, and of other help afforded by one nation to another, in winning the war, in which all were vitally interested. The literal meaning of the American proposal referred to is that the combined nations owing money to the United States would first have to ship, to that and other countries, sufficient merchandise to pay for the foodstuffs and other goods they have to buy in America, which before the war reached $1,500,000,000 in value, and in addition, would have to ship annually more merchandise, to the value of about $700,000,000, to pay the debts with 5 per cent. interest in 35 years. If Europe could produce such a vast quantity of goods, however, the result would be ruinous to the industries of the United States. Such a rate as 5 per cent. for a debt created under such peculiar circumstances, the payment of which must be spread over such a long period of time, is more like the suggestion of avarice than of wisdom. Past experience would suggest a rate of not more than 3 per cent. If this were the rate, the payment of 5 per cent. annually for 31 years would extinguish the debt, principal and interest, or the payment of 4 per cent. annually would end the debt in 47 years.

Tax Burdens.

I spoke at some length last year on the subject of taxation, particularly as to the method of distributing the burden so that it may be borne without ruining those who have done so much to build up our country, and to whom we must look for the creation of new enterprises and for the extension of those now in existence. May I repeat that we can readily bear the cost of the war in this young country if we are fair to one another? We not only cannot bear it, but we are heading for national ruin, if each man seeks to evade his share and by the mere power of his vote, without considering the use they make of their incomes, to load it upon the shoulders of the few who are called rich. Newspaper editors who favor the use of votes for such a purpose write freely about the share of this debt borne by each head of a family, for the purpose of such calculations dividing the national debt evenly among every man woman and child, and calculating the family at four individuals. Nothing could be further from the truth than this, nor, on the other hand, would any such system of taxation be possible. The fault of our system is that it is the most extreme and unfair system in the opposite direction that could be devised. Far from laying the debt upon the shoulders of all, it endeavors to take as much as possible from all incomes exceeding $1,000 for unmarried persons and $2,000 for married people leaving all under these amounts free from any direct tax; while those whose income exceeds certain figures are penalized as if they were sinners, until the point is reached where almost the whole is taken.

Business Retarded.

The highest tax in Canada on income, ordinary and surtax together, reaches 70 per cent. Now it is among the owners of these incomes that the capital for new enterprises or for the enlargement of existing enterprises is obtained. The high surtaxes on incomes are just as unfair and are precisely in the same class as the excess profits tax, now done away with except for the trail of financial trouble left behind and the sense of unfair treatment in the minds of those who were forced to pay it. By requiring business concerns to put a higher value on their commodities for taxation purposes than they would have done in calculating the surplus in their business, the Government has collected vast sums on "profits" that never existed. In the case of very many concerns in Canada and the United States, if the so-called excess profits taken from business by an arbitrary valuation of commodities not yet sold, were entirely returned, the total amount, together with the reserves which such concerns have been able to accumulate after paying normal dividends, would not cover the losses resulting from an adjustment of the prices of commodities to the level of present markets.

Effect on Capital.

It is perfectly clear that as sources of national income the excess profits tax and high surtaxes on income, apart from mere unfairness, are in many ways open to the same objections. They are both unreliable, because of the violent fluctuations in the amount of revenue they produce. Many Canadians have this year paid two years' income tax on stocks which during the year have produced no income whatever. Both these forms of taxation are destructive to new enterprises, causing the investment of any surplus income in non-taxable securities and in other safe bonds, instead of in enterprises involving some risk. Because of grave doubts about the future of any country which imposes taxes too unfavorable to capital, they also cause a general unwillingness to invest in anything which the hand of the Government can reach by such taxes. An effort was made in the United States to reduce the maximum surtax on incomes to 32 per cent., and this was proposed after a profound study of the question of taxation by those who were appointed for the purpose. Congress substituted 50 per cent. for the 32 per cent., and the very able Secretary of the Treasury, in his annual report, restrained as he was by his position, felt impelled to warn the people as to the result. He says: "The evil effects of high surtaxes" fall "ultimately almost entirely upon the mass of the people, who are thereby deprived of the benefits which would result from the free flow of commercial transactions and the use of the additional capital which would be available for productive enterprise."

A Logical Sales Tax.

We have steadily urged that a tax of one per cent. on sales of commodities should be adopted. We already have the system, but in a partial and illogical form. Nevertheless, it produces a very large part of our revenue. Carried to its logical conclusion, it would produce a very much larger sum and would make the readjustment of those forms of taxation which are deterring production and inviting national disaster, quite easy of accomplishment. It might be well to divide the national budget under two headings, one for the service of the country's ordinary expenditures and the other for the war debt. If the turnover or commodities tax of one per cent. were levied entirely for the war service, I am sure that the man does not exist who is loyal and would complain at paying his share of the cost of the war in this indirect and comparatively easy way.

The Future.

Despite the world-wide experience of the pains of contraction by whole nations, and notwithstanding the many unsettled problems still standing in the way of prosperity, we have during the year passed through many remedial stages which were absolutely necessary, whether agreeable or not. We are adjusting ourselves to the creation of our products at a cheaper cost, to a renewed conception of the value of a dollar, and to the necessity for the maximum of efficiency in every effort of industry. If we have due regard to the world's experiences since the war and accept the lessons to be drawn therefrom, and if, as Canadians we purpose to be fair to each other and to work together for the national good as well as for our own; we shall soon again achieve the success in material things which has happily distinguished our past. The tide which has been ebbing will soon turn, and the many nations with troubles infinitely greater than our own will one by one rediscover the road to progress, the basis of which will be the power to buy food and other supplies from nations like ourselves. With that change in the tide, a great emigration from Great Britain and the Continent of Europe will take place and some at least will find their future as settlers on our farms. With our unused acres and our natural resources, our many centres of manufacturing, our established character for industry and energy, and our really great ability to economize, when aroused, we of all nations can surely view the future with courage and confidence.

At the conclusion of the President's address, the report was adopted unanimously. The retiring shareholders' auditors were then re-elected. After the usual votes of thanks to the directors and officers of the Bank, and after amending the by-laws so as to reduce the number of directors from 25 to 24, the meeting proceeded to the election of directors and then adjourned. The scrutineers subsequently reported the re-election of the Board, and at a later meeting of that body Sir Edmund Walker was re-elected President, and Sir John Aird and the Rt. Hon. Sir Thomas White, Vice-Presidents.

Use Structural Steel



A Satisfied Builder

THE selection of structural steel for architectural or industrial construction means the speedy completion of the structure and a thoroughly satisfied owner.

Nothing is more disconcerting to the owner of a building than delay in the progress of work, and this may be avoided by using

Structural Steel

Issued by the Structural Steel Association

The Predominant Need

What is the Predominant need of business to-day—Production or Marketing ?

Don't present day conditions demand a keener study of selling and a closer knowledge of Advertising Activities.

In the days when the production problem predominated, Engineers and Experts ruled the day. Accounting systems were perfected and money was spent lavishly on new cost systems.

All this to eliminate Waste and Guess work and to increase efficiency.

But to-day—when the predominant need is marketing.

Is the Canadian Manufacturer making a scientific study and analysis of his markets, and the factors that influence the sale of his product ?

Is he working on definite knowledge, or is he just guessing? Is he assuming what merchandise will sell? What package will make a hit? What advertising media are best suited for his purpose? If different methods are necessary for the English speaking and French Canadian Markets ?

We have developed a method that proves every step in Marketing and Advertising. This method is at the service of a limited number of Canadian Manufacturers.

We would be glad to have one of our executives discuss this matter with you.

CANADIAN ADVERTISING AGENCY, LIMITED
UNITY BUILDING MONTREAL

The Royal Bank of Canada

GENERAL STATEMENT

November 30th, 1921

LIABILITIES

TO THE PUBLIC:		
Deposits not bearing interest	$ 95,168,911.64	
Deposits bearing interest, including interest accrued to date of statement	280,447,131.90	
		$375,616,343.54
Notes of the Bank in Circulation		31,290,337.14
Balance due to Dominion Government		23,160,749.32
Balances due to other Banks in Canada	2,426.01	
Balances due to Banks and Banking Correspondents in the United Kingdom and foreign countries	10,572,105.10	
		10,574,531.11
Bills Payable		1,733,607.59
Acceptances under Letters of Credit		12,535,480.27
		$457,911,049.00
TO THE SHAREHOLDERS:		
Capital Stock Paid up		20,100,000.00
Reserve Fund	$ 20,400,000.00	
Balance of Profits carried forward	905,044.98	
	$ 21,305,044.98	
Dividends Unclaimed	14,630.77	
Dividend No. 137 (at 12 per cent. per annum) ,payable December 1st, 1921	610,623.00	
Bonus of 2%, payable December 1st, 1921	407,082.00	
		22,337,380.75
		$500,648,429.75

ASSETS

Current Coin	$ 16,012,219.57	
Dominion Notes	28,540,559.25	
United States Currency and other Foreign Currencies	29,912,018.81	
	$ 74,464,797.63	
Deposit in the Central Gold Reserves	13,000,000.00	
Notes of other Banks	2,828,510.11	
Cheques on other Banks	21,594,382.76	
Balances due by Banks and Banking Correspondents elsewhere than in Canada	24,080,818.88	
Dominion and Provincial Government Securities, not exceeding market value	24,050,584.08	
Canadian Municipal Securities and British Foreign and Colonial Public Securities other than Canadian, not exceeding market value	9,832,512.43	
Railway and other Bonds, Debentures and Stocks, not exceeding market value	15,128,520.60	
Call Loans in Canada, on Bonds, Debentures and Stocks	13,080,429.50	
Call and Short (not exceeding thirty days) Loans elsewhere than in Canada	24,513,074.57	
		$222,603,630.56
Other Current Loans and Discounts in Canada (less rebate of interest)	$163,017,159.32	
Other Current Loans and Discounts elsewhere than in Canada (less rebate of interest)	89,132,820.17	
Overdue Debts (estimated loss provided for)	411,365.20	
		$252,561,644.99
Real Estate other than Bank Premises		985,573.59
Bank Premises, at not more than cost, less amounts written off		10,627,758.86
Liabilities of Customers under Letters of Credit, as per contra		12,535,480.27
Deposit with the Minister for the purposes of the Circulation Fund		985,000.00
Other Assets not included in the foregoing		349,341.48
		$500,648,429.75

H. S. HOLT, President

EDSON L. PEASE, Managing Director

C. E. NEILL, General Manager

AUDITORS' CERTIFICATE

WE REPORT TO THE SHAREHOLDERS OF THE ROYAL BANK OF CANADA:

That in our opinion the transactions of the Bank which have come under our notice have been within the powers of the Bank.

That we have checked the cash and verified the securities of the Bank at the Chief office,at 30th November, 1921, as well as at another time, as required by Section 56 of the Bank Act and that we found they agreed with the entries in the books in regard thereto. We also during the year checked the cash and verified the securities at the principal branches.

That the above Balance Sheet has been compared by us with the books at the Chief Office and with the certifed returns from the Branches, and in our opinion is properly drawn up so as to exhibit a true and correct view of the state of the Bank's affairs according to the best of our information and the explanations given to us and as shown by the books of the Bank.

That we have obtained all the information and explanations required by us

S. ROGER MITCHELL, C.A.,
W. GARTH THOMSON, C.A.,
of Marwick, Mitchell and Co.
JAMES G. ROSS, C.A., of P. S. Ross & Sons
} Auditors.

Montreal, Canada, 19th December, 1921

PROFIT AND LOSS ACCOUNT

Balance of Profit and Loss Account, 30th November, 1920		$ 546,928.20
Profits for the year, after deducting charges of management and all other expenses, accrued interest on deposits, full provision for all bad and doubtful debts and rebate of interest on unmatured bills		4,037,836.49
		$ 4,584,764.69
APPROPRIATED AS FOLLOWS:		
Dividends Nos. 134, 135,136 and 137 at 12% per annum	$ 2,436,488.67	
Bonus of 2 per cent. to Shareholders	407,082.00	
Transferred to Officers' Pension Fund	100,000.00	
Written off Bank Premises Account	400,000.00	
War Tax on Bank Note Circulation	203,154.04	
Transferred to Reserve Fund	132,995.00	
Balance of Profit and Loss carried forward	905,044.98	
		$ 4,584,764.69

RESERVE FUND

Balance at Credit, 30th November, 1920		$ 20,134,010.00
Premium on New Capital Stock	132,995.00	
Transferred from Profit and Loss Account.	132,995.00	
Balance at Credit, 30th November, 1921		$ 20,400,000.00

H. S. HOLT, President
Montreal, 19th December, 1921.

EDSON L. PEASE, Managing Director

C. E. NEILL, General Manager

Marine Insurance and Some of its Problems

By A. TUCKER
Dale & Co., Toronto

THE question of Marine Insurance that we have before us this afternoon has so many phases that I propose, with your permission, to confine myself very largely to present day problems. I will give a brief outline of the history of the business, and then deal with it as it affects Canadian foreign trade to-day.

It is a pretty well established fact that Marine Insurance first became a matter of practical business in London in the seventeenth century, when it developed from a private arrangement between a small group of merchants to a business of its own. In the early days a few merchants got together, and each agreed to accept a share of a specific trading voyage, but soon after the middle of the seventeenth century there appeared groups of men who confined themselves to the business and formed the nucleus of an established market. The operations of the principal group were carried on in a coffee house kept by Edward Lloyd, and from their activities the modern Lloyds developed.

While I am on this subject I would like to say a few words as to the scope and activities of Lloyds. It is generally looked upon as an Association of Underwriters specializing in the marine business, but the operations of its elected managing committee are not so well known. It is practically the recognized head of the marine insurance business. Its resident agents cover every foot of the coast of the world. Lists of agents are in the hands of everybody engaged in the marine business, and when a representative in some distant port of the world is required by an insurance company, Lloyds agent is always available, and his report and decision are accepted without any question. He supervises, salvages and acts as trustee for salvage monies, and remits such monies and recoveries to the Committee in London for the benefit of whoever may be interested. The Committee maintains a great number of private signal stations for communication with vessels at sea, and also gathers and disseminates news as to the movement of vessels. It also maintains a register giving a record of the movements of practically all registered vessels, and it is possible through this to go back fifty years or more and find where a certain vessel was on a given day. There is a similar register kept of men holding captain's certificates. It would be impossible to give all the activities of the Committee, but I may mention that it issues medals to the Merchant Service for bravery at sea which are very highly regarded, and also provides pensions in special cases for the dependents of those lost in some heroic sacrifice.

This article on Marine Insurance was delivered as an address by Mr. Tucker at the December meeting of the Canadian Export Club in Hamilton. It is one of the most outstanding examples of the value of these meetings for purposes of getting together, learning about other people's business, especially those parts of their business that are closely related to our own. Mr. Tucker has given a romantic account of Marine Insurance development which would find wide acceptance in a popular literary magazine, and has brought up some vital business questions that are worthy of serious consideration.

—The Editor.

It is unnecessary to trace all the developments of the marine business, and I propose to pass in one step to the beginning of the twentieth century which really marks the active entry of Canada into the trading markets of the world. If we look back to about 1900 or 1901 we find that Canadian ocean trade consisted largely of the export of grain, hay, lumber, packing-house and dairy products, and a comparatively limited quantity of manufactured goods, and the importation of manufactured goods, liquors, fruits and in fact luxuries generally; the Canadian marine insurance market at that time was a correspondingly small affair. There were few steamers owned in Canada, and a large part of the insurance business, at least most large lines, were handled by American brokers and placed in American companies or in London.

The ocean services consisted of lines from Montreal and the Atlantic ports to the United Kingdom and an occasional sailing to the West Indies and Newfoundland, and on the Pacific Coast of the services to Japan and China. These have gradually been increased by regular services to South Africa, Australia and New Zealand, to European continental ports, and in fact to practically all parts of the world, and I am glad to say that the Canadian marine insurance market has fully kept pace with the developments. To-day, instead of the Canadian wheat crop which goes for export being insured in the United States, practically every bushel is insured in Canada, and not only is this the case, but a proportion of the American crop which goes out of Canadian ports is also insured here. The range of exports has increased in proportion to the growth and development of the steamship services, and to-day we have Canadian manufactured goods and Canadian products generally going to every part of the world, and this business is being insured almost entirely in the Canadian market.

This condition was in process of development when the war broke out, and an immediate change came over the market. Difficulties arose for which there was little precedent, and a great many shippers found themselves with valuable cargoes at sea and in danger of capture or sinking by German warships. A great deal of insurance was placed at once against war risk and this marked the inauguration of a tremendous amount of business which lasted for practically five years. This great volume of business brought into the marine insurance markets of the world a flood of new companies, some of which had previously written other lines of insurance, and some of which were formed for the purpose of participating in this new business. The influx of these companies had a peculiar influence and is partly responsible for the unsatisfactory carriage of goods existent even at the present time. I will go more fully into this question a little later.

The first result of the opening of the war was a curtailment of foreign trade, but this condition was soon changed by a tremendous demand from Europe for all varieties of goods, and a demand arose in Canada for new lines of goods for export. This was followed by a requirement for more ocean tonnage, and the shipbuilding industry in Canada received a great impetus. This grew very rapidly and provided more business for the marine insurance market in the line of building risks which formed an important item for several years. This has now largely disappeared owing to the closing of the majority of the yards. This activity in shipbuilding was not confined to steel vessels but was participated in by the Maritime Province yards where the old industry of wooden shipbuilding was revived, and where sailing vessels were laid down in practically every little coast village. These went into the carrying and fishing trades, and owing to the recent great reduction in business they to-day present rather a problem for underwriters owing to lack of employment.

The matter of these sailing vessels brings to mind a picturesque feature not generally realized in the Central and Western Canadian provinces, and this is the trade carried on by the little Nova Scotia schooners. These little boats, which seldom exceed 100 feet in length or 100 tons register, trade all over the world and have some remarkable trips to their credit. A run from Lunenburg or a neighboring port to Portuguese or Spanish Atlantic ports in eleven days is not unusual, and this would test the qualities of a vast number of steamers. The insurance on these vessels is all handled in the Canadian markets and provides an important volume of premium.

The diversity of the marine insurance business in Canada will be noted from a glance at the different interests to be looked after. These include not only exports and imports by recognized steamship lines, but a great many other risks. For instance, there is the Western wheat crop of which a great portion is brought down the lakes; the coal cargoes from Nova Scotia up the St. Lawrence and to other places, generally carried in specially designed steamers; fish cargoes from the Maritime Provinces to Europe, the West Indies and South America, principally by wooden sailing vessels; full cargoes of lumber from the St. Lawrence and Maritime Provinces to Europe, United States ports, and South America; full cargoes of grain across the Atlantic; cargoes of molasses and sugar from the

Bank of Montreal

Established over 100 Years

Capital Paid up - - $22,000,000
Rest - - - $22,000,000
Undivided Profits - $1,501,646
Total Assets - - $517,403,162

BOARD OF DIRECTORS:

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Sir Frederick Williams-Taylor, General Manager

BRANCHES THROUGHOUT CANADA and NEWFOUNDLAND

FOREIGN BRANCHES AND AGENCIES
LONDON, England PARIS, Bank of Montreal (France)
MEXICO CITY
UNITED STATES: New York, Chicago, Spokane, San Francisco —British American Bank (Owned and controlled by the Bank of Montreal)
WEST INDIES, BRITISH GUIANA and WEST AFRICA—The Colonial Bank (in which an interest is owned by the Bank of Montreal)

THE MERCHANTS BANK OF CANADA

Head Office, MONTREAL Established 1864

Paid-Up Capital.....$ 10,500,000
Reserve Fund..... 9,743,375
Total Deposits (April 30th, 1921)..... 154,911,487
Total Assets (April 30th, 1921) 190,367,409

President .....Sir H. Montagu Allan, C.V.O
Vice-President.....F. Howard Wilson
General Manager .....D. C. Macarow
Supt. of Branches and Chief Inspector .....T. E. Merrett
General Supervisor .....W. A. Meldrum

The Spirit of the Institution

It is the wise management—the willingness to serve—the broad and liberal policy—the hearty co-operation—which have helped to make The Merchants Bank the choice of so many corporations and business houses.

399 branches in Canada extending from the Atlantic to the Pacific, of which 149 are in Ontario, 47 in Quebec and 180 in Western Canada.

NEW YORK AGENCY - 38 WALL STREET

165

West Indies; the catch of the sealing and whaling fleets and many other lines.

The insurance of the catch of the sealing fleets is one of the peculiar customs of which there are many in the marine business. Before the sealer leaves for the sealing grounds in the South Atlantic a cover is taken out to protect her probable catch. No liability attaches under this until she reports an actual catch, and as she is away from port for a very long period, the making of this report is a matter of difficulty. To get over this she signals a passing steamer giving the number of skins secured to date with a request that this be transmitted to the authorities at Lloyds. The receipt of this notification is an effective binder under the insurance cover and holds good if the sealer is lost and never heard from again.

Problems of the War

Now to go back to problems nearer home. I mentioned previously that the war had been responsible for many changes in the marine market and indirectly for many difficulties from which we are suffering to-day. The coming of the huge volume of war business into the insurance market brought with it a flood of inexperienced companies and brokers who saw only conditions existing at the moment and did not realize that they were temporary and would radically change when the war ended. Steamship companies and carriers generally found themselves faced with new difficulties, such as scarce and inefficient labor entailing difficulty of protection of goods in their possession, and general carelessness in handling. This, combined with a vast pressure of freight, rendered satisfactory supervision exceedingly difficult and resulted in losses and damage to goods of a nature and volume not previously experienced. These losses took the form of theft and pilferage, breakage, bad stowage, careless use of hooks, and general damage from indifferent handling.

This was where the marine insurance market became interested. War risks were running at very high rates and were proving generally profitable, and the inexperienced companies were perfectly satisfied to take on contracts covering marine risk with all the new hazards added at purely nominal rates provided they could get the heavy war risk premiums. The combined result was generally satisfactory, and in the rush to get the business through and out of the way, the unreasonable proportion of the claims for marine losses was not realized, or if it was realized it was accepted as part of the game as long as war risk was good. Heavy claims for theft and bad handling were paid and filed away, with the result that the carriers were seldom asked to make good losses for which they were undoubtedly liable. This in turn tended to make their supervision still more lax, with the result that losses and damages grew at an alarming rate.

This was the situation when the war ended, and war risk premiums faded away. Where rates had ranged from perhaps $1.00 to as high as $25.00 per cent, they quickly fell away to a matter of a few cents only, and a great number of marine companies found themselves with contracts in their hands covering all kinds of marine and carriers losses at purely nominal figures with no war risks to provide for the claims. There could be only one result. A great many companies failed, others took their losses and withdrew from the business as quickly as possible, and the rest drastically revised their commitments and tried to put their affairs on a stable basis. But if the war risk premiums and losses came to a sudden end the other losses did not. If anything, they increased for a time owing to the sudden release of a vast army of men, many of whom were none too amiable to discipline. Gangs were formed at many ports that carried on wholesale robberies, and it was a long time before this situation was brought under control. It must be remembered that labor was still high handed and independent, and employers had to be somewhat diffident in enforcing care.

Before the war, marine insurance was generally designed to cover marine losses only, that is those losses which were absolutely beyond the control of the carriers, and the carriers were responsible for any losses caused by the neglect or carelessness of their employees. It has now, however, become the custom for shippers to insure against practically any losses that may occur and pay very high premiums accordingly. This is a matter which requires the very serious consideration of you gentlemen, as in the final analysis you

Linked and Welded with Canada's Development

FOR forty-five years the Imperial Bank of Canada has been a basic and constructive element in the industrial, commercial and national progress of Canada. The Bank's organization and capacities have grown with the Country's development. To-day with 220 branches covering the Dominion and strong affiliations throughout the British Empire and in Foreign Countries, every requirement of modern banking service for local, national and foreign trade is fulfilled.

Our intimate knowledge of financial conditions derived from long experience and world wide connections, is always at the service of our clients.

We invite you to take advantage of our facilities.

THE IMPERIAL BANK OF CANADA

Capital Paid up $7,000,000. **Reserve Fund - $7,500,000.**

PELEG HOWLAND, President **A. E. PHIPPS, General Manager**

220 BRANCHES IN CANADA

SOME OF OUR AGENTS ABROAD

Agents in Great Britain

ENGLAND—Lloyd's Bank, Limited
London and Branches.

SCOTLAND—The Commercial Bank of Scotland
Edinburgh and Branches.

IRELAND—Northern Banking Co., Limited
Belfast and Branches.

Agents in United States

NEW YORK—Bank of The Manhattan Company.

CHICAGO—First National Bank.

BUFFALO—The Marine Trust Co.

DETROIT—First and Old Detroit National Bank.

SAN FRANCISCO—Wells-Fargo Nevada National Bank.

Agents in France

Lloyd's and National Provincial Foreign Bank, Limited

Are You Thinking Of Travelling?

THE Travellers' Cheques issued by this Bank, are payable (without delay for identification) at all the principal points in Canada, United States, Mexico, West Indies. South America or Europe either through one of our 535 branches or by the correspondents who represent us throughout the world.

You will find these cheques a very convenient and safe way of carrying your funds.

The Canadian Bank of Commerce

Capital Paid up $15,000,000
Reserve Fund $15,000,000

A Message to Canadians

ONLY by increasing the sale of Canadian commodities can we avoid increasing our foreign indebtedness. Never, even in war time, was it so essential to increase our exports.

A DUTY falls on manufacturers to produce articles of a quality and price that will compare favorably with foreign makes, and on our agricultural interests to increase production.

THE ROYAL BANK OF CANADA

Total Resources $500,000,000

are the ones whose pockets are hit. It is all very well to say that you are paid by an insurance company for your pilferage and similar losses, but you must remember that the insurance company has to collect more in premiums than it pays away in claims or it cannot survive. It not only has to pay claims, but to pay its own expenses and a substantial tax to the Government on every dollar it takes in. You may collect your losses, but you add one more charge to your overhead cost on everything you export.

There is no use in my pointing out a difficulty of this sort without offering a remedy, and I want to show that the remedy is in your own hands. Some risks you must insure, but there are many losses for which the carriers are responsible, and the payment of which is anticipated and allowed for in the rates of freight asked. Shippers and consignees will have to insist on the carriers paying losses for which they are liable, and they will then find that these will steadily diminish. You can contribute to the desired result by giving particular attention to the packing and securing of your goods, and then when claims do arise insisting on carriers making good any losses for which they are responsible. If you do not do so, matters will go from bad to worse, and your insurance costs will go higher and higher.

To illustrate this feature I will mention a case which recently came to my notice. A consignee who carried no theft and pilferage insurance suffered a fairly large pilferage loss and entered his claim against the carriers as he had always done in the past. Payment was refused on the ground that pilferage was a risk that could be insured and that insurance protection should therefore have been provided by the owner of the goods. To put this bluntly, the owner should have paid for insurance to relieve the carriers of a liability for which they had already been paid in the rate of freight they had received. This is a condition which must not be allowed to develop. You may wonder why I am laying so much stress on the question of theft and pilferage and kindred losses, but at the present time they exceed in volume all legitimate marine losses, and represent by far the greater part of the cost of insurance. It is for this reason that I am asking for your special consideration of the matter and for your co-operation in providing a remedy.

To go back to the ordinary marine hazards. These are rapidly assuming the same aspect as they had before the war. For a long time we had difficulties with inferior tonnage and wooden vessels occasioned by war losses, but to-day this condition has changed, and we have as fine a class of boats running out of Canadian ports as we have ever had. Many splendid new vessels will be added next season, and we are looking forward to the steady development of the export trade in Canadian manufactured goods to keep pace with the growth of shipping.

In closing I would like to assure you that the Canadian Marine Insurance Market is fully alive to its responsibilities and to the duty that devolves upon it to assist in advancing and developing this export business. It is in a position to give as good and efficient service as any that can be given on the Continent, and to take care of any business no matter how large or how difficult.

Imperial Tobacco Company

Little Change Shown in Position for Year Ended September 30th.

Net profits of the Imperial Tobacco Company of Canada, Limited, for the year ended September 30th, 1921, stand at $3,336,783 as compared with $3,386,150 at the close of the previous financial year. Dividends paid during the year amounted to $2,07,783 as compared with $3,386,150 at the close of the previous financial year. Dividends paid during the year amounted to $2,077,961 as compared with $2,022,411 last year. The balance has risen from $4,224,673 to $4,373,470.

The assets of the company have been increased during the year by the purchase of certain trade names, trade marks and brands and the goodwill attaching thereto from the British-American Tobacco Company, Limited, for $2,000,000 and by the purchase of shares in other companies. Cash in bank is $3,591,018 as against $104,903. Stock in trade and leaf funds have been reduced from $14,755,963 to $12,916,944.

Foreign Banking Service in Canada's Commercial Capital

The Union Bank of Canada placed the headquarters of its Foreign Department in Montreal because at this point it is best able to serve Canadian business men in foreign trade.

This location and private wire connections between branches in New York, Montreal, Toronto, Winnipeg, and connections with Vancouver, enable us to keep closely in touch with conditions in Canada and abroad.

Through continual operations in the exchange markets of Canada, the United States, Great Britain, and world centres, we are able at all times to handle international exchange at closest possible rates.

Union Bank of Canada



The Installation

of electric wires and cables, as well as their manufacture, has been our constant study for many years.

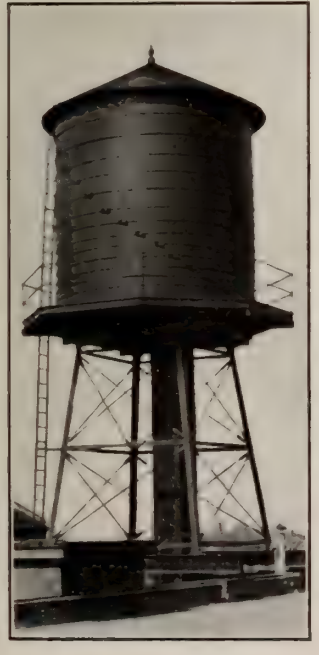
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Standard Underground Cable Co. of Canada, Limited

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TORONTO Tanks are made of Tank Grade Lumber, selected specially by an expert lumber buyer. Supplied in B. C. Fir, Pine, Cypress or Redwood.

Steel Towers supplied according to specification or to suit requirements.

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MONTREAL WINNIPEG REGINA CALGARY

Royal Bank of Canada

Stronger Cash Position Shown in Annual Report in Spite of General Deflation

In spite of the general deflation that has characterized the past year the Royal Bank of Canada shows in its recently-issued annual report that it has come through the trying period successfully and, in fact, has now an even stronger cash position than before.

A development that will be very gratifying to the shareholders is that the Bank, in meeting the changed conditions, has fully maintained its strong position, by reporting liquid assets equal to 48.61% of total liabilities to the public. Included in liquid assets are actual cash, as represented by gold, current coin, Dominion notes and balances due by other banks, equivalent to 29.69% of liabilities to the public.

Of almost equal import to shareholders is the fact that the Bank, even during the readjustment period, has maintained its profits close to the level of the previous banner. As is well-known, business conditions for some time past have been of an exceptional character, and owing to these conditions the Bank, in addition to writing off any losses, has made full provision for any accounts that might even be considered doubtful. In view of this policy, it should be particularly gratifying to the shareholders that the net profits, after making such liberal provision, amounted to $4,037,836, compared with $4,253,649 in the Bank's record year.

These ample profits have permitted of the payment of the usual dividend of 12% and a bonus of 2%, and after the customary appropriations to pension fund, for bank premises and war tax and the transfer to Reserve Fund of $132,995, there was an amount carried forward out of the year's profits of $458,116.78. This made the total of Profit and Loss to be carried forward into the new year $905,044.98.

Just how satisfactorily the Royal Bank has met the changed conditions is reflected by the statement of assets and liabilities, as of November 30th. Of total assets of $500,648,429, liquid assets amount to $222,603,630. Principal accounts among the liquid assets are Current Coin $16,012,219, Dominion Notes $28,540,018. Cheques on Currency and other Foreign Currency $29,912,018. Cheques on correspondents, elsewhere than in Canada, $24,080,818; Dominion and Provincial Government securities $24,050,584; railway and other bonds $15,128,520; and total Call Loans of slightly over $37,000,000.

Deposits now total $375,616,343, and of this amount deposits bearing interest stand at $280,447,431, and deposits not bearing interest $95,168,911. The paid-up capital is $20,400,000, and during the year additions made to the Reserve Fund have also brought it up to $20,400,000, at which figure it is equal to the capital.

The advantages of the Canadian banking system have perhaps never before been so strikingly shown as during the deflation and readjustment period. The statements of the leading banks of the country would indicate that under the Canadian system the larger banking institutions of the Dominion have met the conditions arising from deflation in a more satisfactory manner than almost any of the larger institutions of the world. For a country in a state of development, as is Canada, such a record is a notable one. It is bound to result in Canadians having a greater appreciation of the constructive work being done by the banks, while in outside countries it will be a great factor of increased confidence in the fundamental strength of Canada's position.

Sales Are Increasing

K. & S. Tire & Rubber Goods, Limited, Toronto, Issue Six Months' Statement

A statement of the condition and earnings of the K. & S. Tire & Rubber Goods, Limited, Toronto,, for the six months ending September 30, shows the company to be doing a good business, with steadily increasing sales. Profits for the half-year after operating expenses and charges are placed at $82,713 as compared with $40,534 for the same period last year and $98,131 for the full year 1919. During the last six months of 1920 the company was not operating, owing to plant extensions and installation of equipment. Sales of the company's product, which were $190,000 in 1916, are estimated at $1,500,000 for the calendar year 1921. Tire equipment is being supplied to the Ford Motor Car Company of Canada and to the other banks $21,594,382; balances due by other banks and banking Gray-Dort Motor Company at Chatham.

CANADIAN
BITUMINOUS
COAL
"BRANTFORD" ROOFING MATERIALS
Building Brick Crushed Stone
Sewer Brick Sand
Fire Brick Fire Clay
Cement Hydrated Lime
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"MEDUSA"
Waterproofing and Stainless White Cement
Write for Prices
STINSON-REEB
BUILDERS' SUPPLY CO., LIMITED
45 St. Alexander St. : Montreal

THE BRITISH GOVERNMENT
(Department of Overseas Trade)
announces that the eighth annual
BRITISH INDUSTRIES FAIR
will be held at
LONDON AND BIRMINGHAM
from
27th February to 10th March, 1922
All Canadian buyers are cordially invited to attend
A particularly fine and comprehensive range of
Machinery, equipment, manufactured parts and other supplies.
will be shown
Goods can be examined, values compared and contracts concluded at the Fair with the minimum of trouble and the greatest saving of time.
Full information and complimentary admission cards are obtainable from:—
H. M. SENIOR TRADE COMMISSIONER
248 St. James Street, Montreal.
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Just what you require for record work that must stand frequent handling and yet remain crisp and fresh

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ENVELOPE MANUFACTURERS AND PAPER DEALERS

Toronto Brantford Winnipeg Calgary Vancouver

Canada's Industrial Expansion

A RECORD OF PROGRESS

New Brockville Industry

J. R. Baxter & Company, Building Plant to Manufacture Abrasive Wheels

J. R. Baxter & Co., 102 St. Antoine Street, Montreal, will in the very near future let the contract for the construction of a 200-foot by 60-foot factory in Brockville, Ontario, for the manufacture of abrasive wheels, states *Canadian Machinery*. The plant is to be in operation by the spring. Two kilns will be used to begin with and a third and a fourth added as conditions justify. A new company will be formed for which incorporation papers will be taken out later and which will be operated as a separate concern from the J. R. Baxter & Co.

J. R. Baxter, who will be the president of this company, formerly occupied the same position in the Dominion Abrasive Co. of Mimico, Ont., and so has had considerable experience in the field. The idea behind the new organization is to go out for British Empire trade. With this object in view Mr. Baxter recently spent some months in England studying conditions with a view to building the plant there, but it was found that costs, particularly in connection with taxes and labor, were so high that production would be cheaper in Canada so that it was decided to retain the organization in this country although an English branch has been organized for the export trade which it is hoped to develop. The organization of the company has been held back for eighteen months until a competent expert for the manufacture of abrasive wheels has been secured. This has been accomplished in the engagement of Edric Sawyer, formerly with the Dominion Abrasive Co., and also with the Safety Emery Wheel of Springfield.Ohio. Mr. Sawyer will be the manager of the factory.

Installing Electric Furnace

William T. Stephens Remodelling Collingwood Plant for Operation in February

By an agreement with the municipal council of Collingwood, Ontario, William T. Stephens has taken over the Electric Furnace plant which was originally the property of the Kennedy Company, later purchased by the Baldwin Canadian Steel Corporation, and is now owned by the town. Mr. Stephens at the present time is remodelling the plant and installing a complete new electric furnace with a daily capacity of 25 tons. This will be ready to operate about February.

A company will be formed to take over and operate the plant as soon as the present alterations are completed. Details of the company and information as to the lines to be manufactured will be announced later.

Piano Company Purchased

Cecilian Piano Company, Toronto, now Being Operated by Frank Stanley

Frank Stanley, of the Stanley Piano Company, Toronto, has purchased the plant and business of the Cecilian Piano Company of that city which went into liquidation some time ago. The purchase includes the factory building and plant at 91 Niagara Street, the retail store at 247 Yonge Street, all stock in process and the book debts. The total assets were valued at over $200,000, and the purchase price was about $90,000.

The parent Cecilian Company began operations in Detroit in 1883, producing an all metal aluminum action. They were pioneers in the production of automatic player instruments from the first organ to the piano player attachment and finally to the interior player action that is known to the public to-day.

They brought out the first all metal aluminum player action in the world, and this is now established strongly in the United States and England by individual companies, and in Canada the interest and patents which are now owned by Mr. Stanley are of great value to the piano trade.

Mr. Stanley proposes to continue manufacturing operations in the same factory building, which has been modernized by the addition of a sprinkler system, and the latest machinery. Upright and player pianos with the Cecilian player action will be produced, as well as the Cecilian phonograph. The phonograph end of the business was very prosperous and the entire organization was first class, so the new owner feels confident of success.

Manufacturing is already well under way, and regular shipments will begin early this year. The business will be continued under the same name, i.e. Cecilian Piano Company, ownership of Frank Stanley.

Are Enlarging Plants

Lloyd Manufacturing Company, Orillia, have more Floor Space and Install new Machines

The plant of the Lloyd Manufacturing Company who manufacture woven fibre goods at Orillia, Ontario, is being enlarged by the acquirement of some 40,000 square feet of additional floor space in which weaving machines, fibre spinning machines and other machinery incidental to the manufacture of baby carriages, doll carriages, floor lamps, library lamps and wicker furniture of all descriptions are being installed.

The new machines are made in the plant of the parent company at Menominee, Michigan, and are the inventions of their president, M. B. Lloyd. The company expect to be in full operation early this year and with the aid of the improved facilities mentioned are counting on trebling their capacity and output.

Writing on December 13th to INDUSTRIAL CANADA, A. J. Lloyd, manager of the Orillia company, states that though business for 1921 does not come up to that of the previous year they have no reason to complain, finding that at the worst it is about 90 per cent. normal.

Plant Reopened

Hanbury Manufacturing Company, Limited, again in Operation at Brandon, Manitoba.

On October 1st the Hanbury Manufacturing Company, Limited, re-opened their plant at Brandon, Manitoba, and are carrying on the manufacture of boxes of all kinds, crates, shooks, etc., cross arms and open sash. They now have one of the best equipped plants in the West as a considerable amount of new machinery has been installed to bring it up to date. At present they are employing twenty hands and this number will be increased as the business grows.

Expecting Large Business

McIlroy Belting Works of Canada, Limited, Experiencing Good Conditions at Kingsville

The McIlroy Belting Works of Canada, Limited, who were incorporated last year at Kingsville, Ontario, for the manufacture of cotton and leather belting, webbing and hood lacing for automobiles and asbestos brake lining for automobiles and industrial purposes, report that they have made connections with some of the largest jobbers in Canada, from whom they expect to receive a large business during 1922.

The company also cater to foreign business and have every assurance of receiving a good volume of trade in South America, South Africa and India as soon as conditions improve.

Clock Company Expanding

Western Clock Company, Limited, Peterborough, Buy Site for New Plant

The Western Clock Company, Limited, makers of the Westclox line of clocks and watches, who purchased a building and began manufacturing in Peterborough, Ontario, about two years ago, have bought a fifteen acre block of land in the eastern part of the city, as business expansion demand new quarters within a short time.

The manager of the company states that business is very good and up to the present time it has not been necessary to curtail production; in fact, the staff has been increased during 1921. The prospects for 1922 are very bright, and there is every indication that the building now occupied will be much too small to provide for the expected market. Enough business is in sight to give an output of from 900 to 1,000 movements a day and the company cannot produce that many in their present plant.

Making New Product

B. J. Coghlin Company, Limited, Montreal, Manufacturing Lyon Resilient Automobile Bumper

The B. J. Coghlin Company, Limited, Montreal, have recently taken over by license all the patents covering the Lyon resilient automobile bumper and are making all designs of this for both front and rear of pleasure cars and trucks. To take care of this development of their busines they found it necessary to install a complete sand blasting and nickeling outfit.

The company have also installed fuel oil furnaces throughout their spring and forge shops. These include a number of very large furnaces of the latest design ..

Finishing Main Building

Cranbrook Sash & Door Company, Limited, to be in Operation next March.

The main building of the new plant which the Cranbrook Sash & Door Company, Limited, are building at Cranbrook, British Columbia is nearly finished. It is a two-storey structure 112 x 60 feet and machinery is now being installed in it. The boiler room, dry kiln and lumber sheds remain to be built but the company expect to be ready for operation by March 1st, 1922. Windows and doors of fir, cedar and pine will be the principal products but a considerable business will also be done in interior and exterior trim, windows and door frames. The daily capacity of the plant will be about 500 windows and 200 doors, and from forty to sixty men will be employed.

The personnel of the company is:—H. A. McKowan, president and general manager; W. T. Attridge, secretary-treasurer; J. H. Spence, vice-president and Jos. Woodman, director. The capital employed in the plant will be about $50,000.

The company also operate a sawmill near Cranbrook with a capacity of 40,000 feet a day and expect next year to add a box factory to their enterprises for the manufacture of fruit and butter boxes.

New Assembling Plant

Starr Company of Canada, Limited, Assembling Phonographs and Pressing Records in London

The Starr Company of Canada, Limited, are now operating an assembling plant for Starr phonographs in London, Ontario. These were formerly imported from the parent plant in the United States, but now the cabinet work and finishing is all done in Canada with most satisfactory results.

The company are also pressing all Starr records in Canada, and since they have taken over this part of the parent company's business they have been able to develop a considerable export trade with parts of the British Empire, particularly with Australia, New Zealand, South Africa and Jamaica.

T. G. Booth, A. Dunlop, C. J. Card and S. Holmes are promoters of a company, capitalized at $100,000, organized to manufacture fibre from raw flax in Manitoba. At the first meeting of the company it was decided to purchase a mill at Neepawa, Manitoba, which would be capable of handling straw from 2,000 acres of land.

Machinery and Equipment Built to Your Specification

We have excellent facilities for such work

Units produced in our shop are now in use by brick yards, rubber factories, abattoirs, power plants, contractors, paper plants, and many others. We solicit general plant repairs and replacements.

LET US HAVE YOUR BLUEPRINTS FOR QUOTATIONS

CANADIAN RUMELY COMPANY, LIMITED

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General Machinists, Blacksmiths, Sheet Metal Workers and Gray Iron Founders.



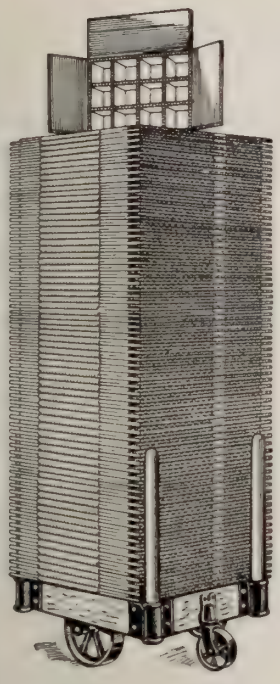
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Sherbrooke, Quebec

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AND
STEEL PLATE WORK

Photo illustrates four oil storage tanks and support recently erected by us.

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FOLDING CELLBOARD
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Established 1909

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We desire to have your samples or measurements to quote on when you are considering placing an order

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this "Canadian Products Annual Review" carries forcible conviction of the country's enterprise. It indicates the high standard of Canada's products, and the permanent nature of her manufacturing plants.

An outstanding example is the Canadian Salt Company. The Chemical Plant at Sandwich, Ontario, is a modern plant, its equipment being equal, if not in advance, of any on the Continent. It produces the famous—

WINDSOR BRAND

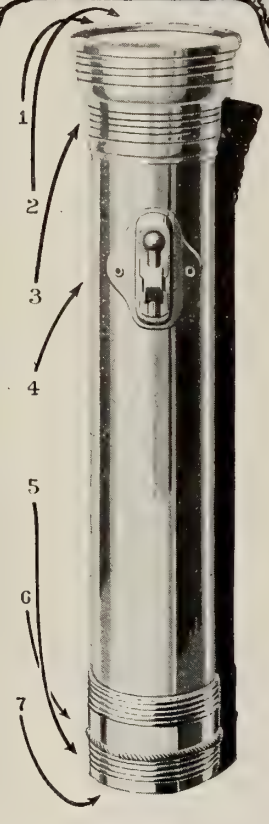
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The Canadian Salt Co., Limited - Windsor, Ont.

CHEMICAL PLANT AT SANDWICH, ONT.







SEVEN BIG IMPROVEMENTS

1. New scientific reflector concentrates light rays to give more light and throw it farther.
2. Special Eveready Mazda lamp of increased brilliancy and power.
3. Shock absorber to prevent breaking of lamp.
4. In addition to usual "slide" contact for continuous burning, the spotlight has "flash" contact for intermittent lighting.
5. Compartment holding two extra Eveready Mazda lamps.
6. Exclusive focusing device. Light instantly focused by turning end cap to right or left.
7. End cap shows renewal type numbers for battery and Mazda lamp.

Nickel type No. 2674

Corrugated Fibre Type No. 2672

Of Course You'll Take One Home With You—

THIS new Eveready Spotlight is the biggest achievement yet — and made by the folks that made the first flashlight ever created.

Besides doing everything any flashlight has ever been able to do, the Eveready Spotlight has 7 great advantages all its own — and throws a stronger light farther — "the flashlight with the 300-foot range"!

Stop in and see this wonderful new Eveready Spotlight demonstrated. The most useful flashlight you ever picked up . . . At hardware, electrical, and auto accessory shops — garages — sporting goods, drug, and general stores . . . Of course you'll take one home with you.

EVEREADY SPOTLIGHT

With the 300-Foot Range

CANADIAN NATIONAL CARBON CO., LIMITED
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Holden Company, Limited

Have Assumed Control of the Canadian Brakeshoe Company Limited, Sherbrooke

It has been announced that the Holden Company, Limited, of Montreal, Toronto, Winnipeg, and Vancouver, have assumed control of the Canadian Brakeshoe Company, Limited, of Sherbrooke, Que. N. J. Holden, president of the Holden Company, has been elected president of the Brakeshoe Company as re-organized. The Brakeshoe Company are manufacturers of electric steel castings and the result of the absorption of this company by the Holden Company will be that the latter concern will have their own foundry, in which they will be able to manufacture everything they sell. It is understood that in taking over the concern the Holden Company acquired all the stock, consisting of $100,000 in preferred and $50,000 in common.

New Machinery Installed

Ontario Gypsum Company, Limited, Report a Great Improvement in their Products

The Ontario Gypsum Company, Limited, Paris, Ontario, have recently installed at their Caledonia mill new machinery which wonderfully improves their product. It has been proved by the United States Bureau of Standards that calcined plaster, when confined in a ball mill and ground for a certain length of time, will release its moisture of crystallization. Before the plaster is thrown out of the mill the moisture is taken up again evenly distributed. The result is a very plastic form of plaster.

The machinery which the Ontario Gypsum Company have installed takes advantage of this discovery, and their products, hardwall plaster, plaster of paris, etc., are greatly improved in quality. They will carry more sand and spread with greater ease on the wall and this is a saving to the plastering contractor.

The Currie Manufacturing & Lumber Company, Limited, Brandon, Manitoba, have just installed some new machinery in their already well-equipped plant, and are now manufacturing a complete line of school equipment. They have recently patented a very unique movable chair desk, which should have a large sale.

The Farmers' Packing Company, St. Boniface, Manitoba, have completed the erection of a two storey brick and concrete building for use as cooling and storage rooms. The cost of the addition is in the neighborhood of $35,000. The dimensions are 33 x 74 feet.

Position desired by young Canadian Engineer as

ENGLISH REPRESENTATIVE

of Canadian manufacturer making a product suitable for the English market. Applicant familiar with England. Salary and commission preferred. Only reliable firm with first class product considered.

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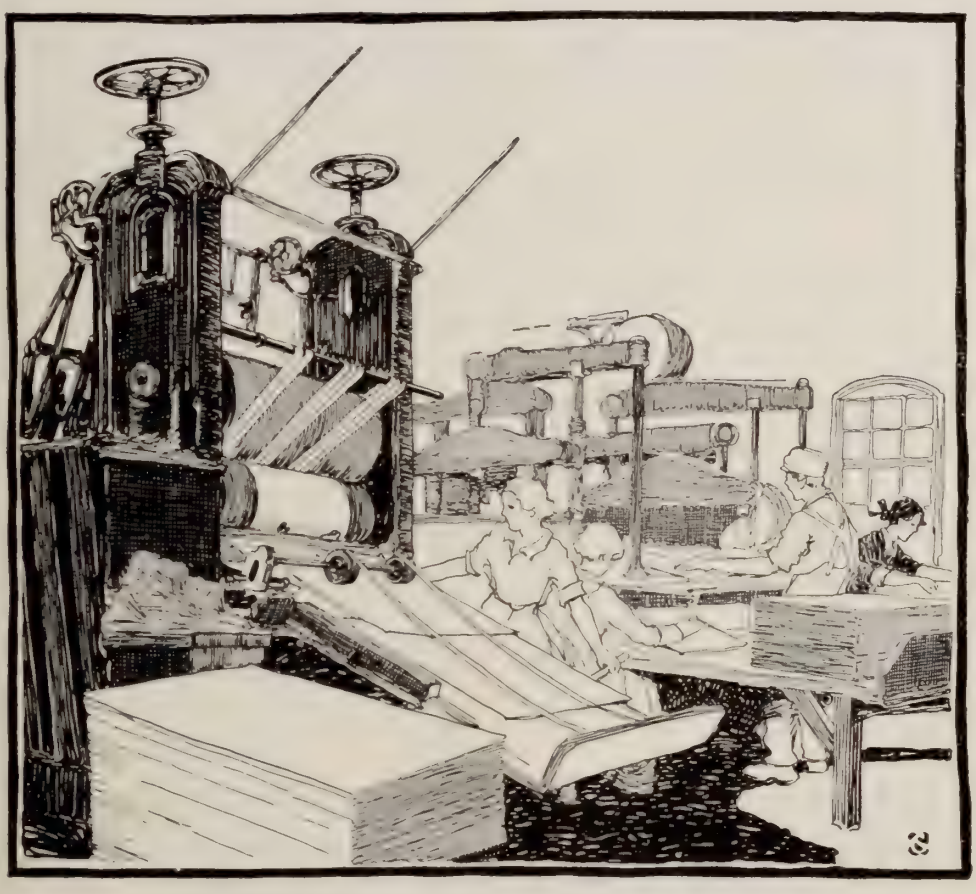
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A member of the C.M.A., having branch warehouses throughout Canada, is in a position to accommodate one or more other members with warehouse space and "service" distribution at several points, provided goods are received and shipped in unbroken packages or case lots. Can also attend to invoicing if desired.

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The Pulse of Business in Canada

THE statistics by which the general situation of business may be judged show things in a fairly favourable light. There has been a decrease in both imports and exports but the exports are some twenty millions ahead of the imports which is a hopeful sign. The employment situation shows a slight tendency towards improvement and building activity was greater in November than in the same month of 1920.

Wholesale prices declined in both October and November and the general opinion is that deflation is practically complete. Fire losses were lower during November, but the year's total will be ahead of 1920.

With the banks, clearings decreased during November. The October statement shows an increase in demand deposits and a decrease in savings deposits.

Trade Returns

Imports aun Exports for November, 1921, are Lower than for Corresponding Month of 1920.

The month of November, 1921, witnessed another decrease in Canadian trade as compared with November, 1920, though the figures are somewhat higher than those for October, 1921. Imports have declined some thirty-three millions and the imports amount to about sixty-one millions less than last year. Dutiable imports of iron and steel and manufactures therrof continue to fall. Among exports the greatest decrease is seen in agricultural and vegetable products. Below are the figures for November as given in the Department of Customs' Summary: —

IMPORTS ENTERED FOR HOME CONSUMPTION

Month of November

	1920		1921	
	Free	Dutiable	Free	Dutiable
Agricultural and vegetable	Domestic	Foreign	Domestic	Foreign
	$	$	$	$
products, mainly foods	2,414,052	8,468,633	2,154,842	9,175,122
Agricultural and vegetable products, other than foods	2,565,542	3,559,009	2,291,804	2,450,786
Animals and animal products	1,184,988	2,865,977	1,253,839	2,660,573
Fibres, textiles and textile products	4,871,718	10,187,344	4,512,643	6,986,268
Chemicals and chem. products	1,348,311	1,773,620	1,221,792	1,510,728
Iron and steel, and manufactures thereof	4,011,236	16,597,189	1,460,165	6,616,155
Ores, metals and metal manufactures, other than iron and steel	1,188,002	3,899,581	789,260	1,889,034
Non-metallic minerals, & products	8,651,656	12,609,903	5,778,636	5,854,975
Wood, wood products, paper, and manufactures	2,152,737	3,597,550	1,175,717	2,157,037
Miscellaneous	3,457,010	3,267,058	1,774,006	2,560,052
Total	31,845,252	66,825,864	22,412,704	41,858,730
Duty collected		13,188,768		9,891,761

EXPORTS

Month of November

	1920		1921	
	$	$	$	$
Agricultural and vegetable products, mainly foods	78,316,187	68,736	44,492,635	50,324
Agricultural and vegetable products, other than foods	2,470,013	10,615	1,081,384	100,914
Animals and animal products	21,880,764	97,338	13,257,815	126,914
Fibres, textiles, and textile products	1,165,083	184,323	404,146	41,983
Chemicals and chem. products	1,726,601	115,702	658,563	10,604
Iron and steel, and manufactures thereof	7,780,542	346,027	3,901,409	250,949
Ores, metals and metal manufactures, other than iron and steel	5,092,112	69,389	2,248,042	108,427
Non-metallic minerals, & products	3,273,790	126,402	1,841,031	60,791
Wood, wood products, paper, and manufactures	23,482,199	28,656	17,711,326	50,078
Miscellaneous	2,320,711	192,714	937,511	305,171
Total	147,508,002	1,239,902	86,533,862	1,106,155

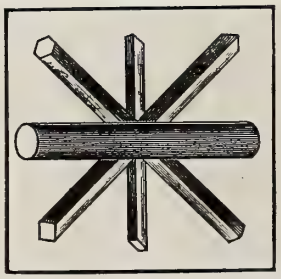
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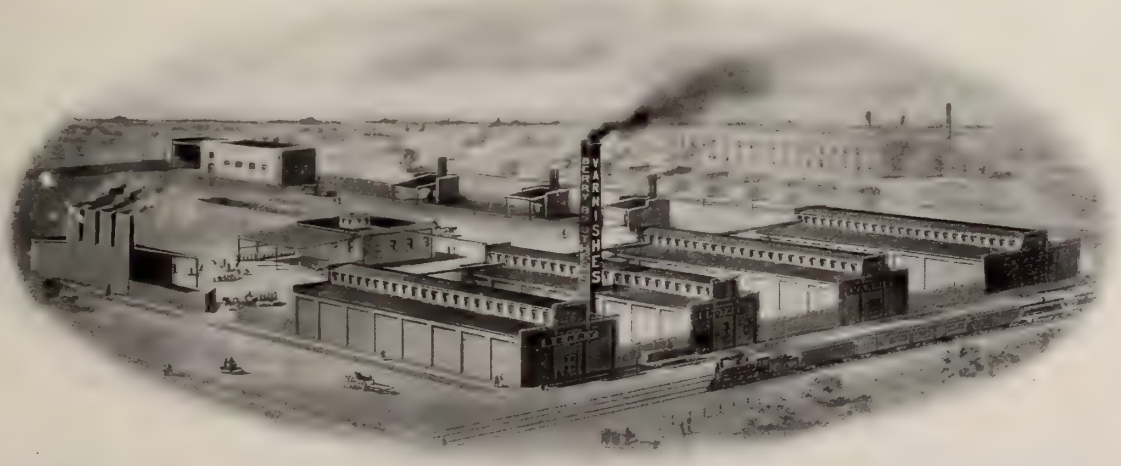
Our new number 1921 Rubbing and Polishing Varnish will meet the requirements of present day shop methods and particularly those of furniture manufacturers. The results obtained by this varnish cannot be surpassed, and we are confident that a demonstration is all that is needed to convince you of its superiority over others.

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Berry Brothers Inc. Walkerville Plant

Railway Earnings

Canadian Pacific Earnings for October Lower, but National Railways Show Increase

Earnings of the Canadian Pacific Railway during October, 1921, show a decrease when compared with those of the same month of 1920. Both gross and net earnings, however, are the largest recorded during any month of the year, and the general upward trend is encouraging.

The Canadian National Railway System for the 10 months ending October 31st, had been able to cut the operating deficit of the same period of 1920 in half and net earnings for October, amounting to $1,036,130 established a new record.

For the ten months ended October 31st, 1921, the net operating income of the Grand Trunk Railway amounted to $1,830,000, which compares with $215,573 for the same period of 1920.

Below are given the October figures:—

CANADIAN PACIFIC RAILWAY

	October, 1921	October, 1920
Gross Earnings	$22,089,624	$24,800,712
Operating Expenses	15,378,138	17,099,891
Net Earnings	6,711,486	7,700,821

CANADIAN NATIONAL RAILWAYS

	October, 1921
Gross Earnings	$12,906,132
Operating Expenses	11,870,002
Net Earnings	1,036,130

Wholesale Prices

Index Numbers Show a Decline During October and November

The index number published by the *Labour Gazette* shows a decline in wholesale prices for October, standing at 229.2 as compared with 232.7 for September, 317.6 for October, 1920, and 138.7 for October, 19th.

Professor H. Mitchell's index number of wholesale prices for the month of November stood at 160.0, which is a decline of 9 per cent. from the previous figure of 161.5 for October, or a total decline of 46.3 per cent. from the peak reached in May, 1920, of 298.3, and an advance of 31.2 per cent. over the index for November, 1913, of 121.9. Among the twenty foodstuffs there were advances in eggs and cheese, and declines in flour, mutton, bacon, lard, fish, granulated sugar, potatoes and oatmeal. Among the twenty manufactured goods, there were advances in rubber, galvanized sheets, lead, coal oil, pine and oak, while cotton and silver declined. The downward movement in manufactured goods seems to be at an end, but foodstuffs are still falling slightly.

The Canadian Bank of Commerce's November index number of wholesale prices for exports is 144.05, a fall of 6.01 below the October figure. This is chiefly due to the continued decline in the prices of wheat and other cereals. The figure for imports reached 150.34, a rise of 1.53 during the month.

Building Conditions

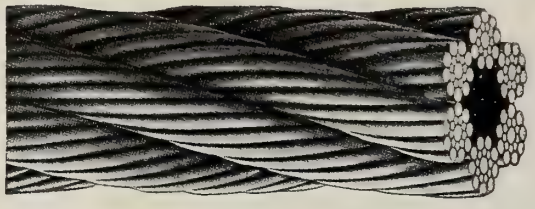
Construction Activity During November Shows an Increase over last year.

Construction activity in November, according to figures published by MacLean Building Reports, Limited, amounted to $16,639,800, compared with $18,997,200 in October, compared with $18,997,200 in October and $15,399,200 in November, 1920. The totals for the different Provinces are as follows:—

	No. of Projects	Value
Ontario	1,072	$11,825,000
Quebec	528	3,276,100
British Columbia	138	696,500
Saskatchewan	41	194,800
Nova Scotia	33	189,200
Manitoba	31	165,300
New Brunswick	12	162,100
Alberta	29	139,800
Total for Dominion	1,884	$16,639,800

Work reported during November, for the first time, as contemplated, totalled $13,998,600. The figures for the Dominion are as follows:—

	Projects	Value
Ontario	236	$7,281,700
Quebec	269	3,172,900
Western Provinces	113	3,039,500
Maritime Provinces	12	504,500
Total for Dominion	630	$13,998,600



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October Bank Statement

Increase in Demand Deposits and Decrease in Savings Bank Deposits

The October bank statement shows an increase in demand deposits, as compared with September, of approximately $31,000,000. and a decrease in savings bank deposits of about $12,000,000. Savings bank deposits totalled $1,251,323,839, as compared with $1,263,763,852 in September and $1,271,275,751 in October, 1920. Call loans in Canada last month totalled $105,362,186, a decline of rather more than a million dollars as compared with the month previous. Call loans outside Canada last month totalled $172,013,135, in comparison with $183,290,756 in September. Current loans both in Canada and elsewhere than in Canada show an increase in comparison with September. Following is the detailed statement:

	Oct. 1921.	Sept. 1921.	Oct. 1920
Reserve fund	$ 135,067,554	$ 135,065,636	$ 130,413,339
Note circulation	193,546,363	186,797,922	249,165,707
Demand deposits	565,650,636	534,307,452	687,651,781
Notice deposits	1,251,323,839	1,263,763,852	1,271,275,751
Deposits outside Canada	281,254,860	295,574,501	330,955,233
Current coin	77,932,332	77,908,368	79,823,476
Dominion notes	166,958,268	173,658,968	178,921,891
Deposit Central gold reserve	69,402,533	70,302,533	119,202,533
Call loans, Canada	105,362,186	106,729,270	113,135,902
Call loans, outside	172,013,135	183,290,756	188,367,459
Current loans, Canada	1,243,748,818	1,239,637,351	1,405,401,227
Current loans, outside	156,518,933	151,489,861	193,749,657
Total liabilities	2,519,098,671	2,512,585,100	2,868,516,190
Total assets	2,806,827,597	2,802,532,029	3,155,601,568

Railways Show Improvement

Operating Ratio in September Lower than in September, 1920, or August, 1921

For the month of September, 1921, the Canadian railways continued to show an improvement in operating ratio, according to a report issued by the Transportation Branch of the Dominion Bureau of Statistics. In September the operating ratio was 85.56 per cent., as against 96.69 per cent. for September, 1920, and 86.41 per cent. for August, 1921. With the harvesting of the crops the freight traffic shows considerable increase over August namely, 734,121,606 revenue ton miles over 38 per cent. The passenger traffic shows a decrease of 16 per cent. from September, 1920, and a decrease of over 21 per cent. from August, 1921; the latter is more or less seasonal. The total revenues show a decrease of $2,509,421, or 5.5 per cent., while the expenses show a decrease of $7,708,329 or 16 per cent. The pay roll shows a decrease of $7,708,329, or 27 per cent. The September, 1920, pay roll, however, included $2,211,835 reported as back pay.

Fire Losses

November Figures Show Large Decrease but Loss to Date Exceeds Last Year's

Fire losses in Canada in November are estimated by *The Monetary Times* at $1,818,750, compared with $2,199,700 in October, and with $2,769,800 in November last year. The month's loss is made up as follows:

Losses exceeding $10,000	$1,155,500
Small fires reported	163,250
Estimate of unreported fires	500 000
Total	$1,818,750

The loss for the eleven months is estimated at $28,034,910, exceeding the total of $27,706,574 for the whole of 1920.

Business Failures

Increase of 74 Per Cent. in Last Week of November and First Three Weeks of December

During the last week of November and the first three weeks of December the number of business failures showed an increase of 73 84 per cent. when compared with the corresponding periods of 1920. The total of the four weeks under review as reported by Bradstreet's, amounted to 226. Following are the figures as given:

Week Ended	1921	1920
November 24	55	33
December 1	51	27
December 8	55	27
December 15	65	27
Total	226	130

Announcement

The Northern Electric Company, Limited, has acquired the Canadian Patents of the Automatic Electric Company of Chicago. Illinois, U.S.A., and now has the exclusive right to manufacture and sell **STROWGER AUTOMATIC TELEPHONE** equipment in Canada under these patents, which cover Private Branch Automatic Exchanges (P.A.X.), and Community Automatic Exchanges (C.A.X.), as well as Central Office Exchanges of larger capacities (M.A.X.).

Among these patents are the following:—

Numbers:— 140,337; 140,338; 145,308; 148.663; 148,664; 158,150; 159,469; 159,470; 159,741; 159,891; 159,892; 162,808; 163,590; 166,115; 166,116; 166,250; 166.794; 166,928; 167.024; 167,025; 167,105; 167,706; 168,720; 169,004; 169,435; 170,235; 170,236; 170,646; 171,099; 171,776; 172,567; 172.884; 173,672; 173,673; 174,416; 174,665; 174,946; 174,947; 175,100; 175,101; 175,102; 175,397; 175,398; 176,901; 176,902; 177,065; 177,469; 178,515; 178,516; 178,633; 178,634; 178,635; 178,870; 178,986; 178,987; 178,988; 179,109; 179,110; 179,251; 180,250; 180,374; 180,375; 180,965; 181,124; 181,300; 181,642; 183.490; 186,406; 187,033; 187,775; 195,930; 196.385; 196,911; 197,774; 199,202; 199.203; 199,392; 199,617; 200,845; 202,284; 206,127; 206,367; 207,548; 208,008; 208,607; 209,118; 209,355; 210,753; 210,754; 211,442; 211,443; 211,662; 211,936; 212,206; 211,257.

This company is also the exclusive licensee under Canadian patents of the International Western Electric Company, Incorporated, and other Companies associated with the American Telephone and Telegraph Company, many of which patents relate to automatic telephone equipment.

The Northern Electric Company, Limited, is prepared to manufacture and supply at reasonable prices the various types of automatic telephone equipment covered by the above patents and must ask that its exclusive rights under these patents be respected. In case of infringement, the user is liable as well as the manufacturer or dealer, and prospective purchasers should bear this in mind in placing orders, as the Northern Electric Company, Limited, in order to maintain its rights will be compelled to prosecute infringers.

Northern Electric Company
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All Canadian hand power Punches and shears are made with "Armor Plate" frames.

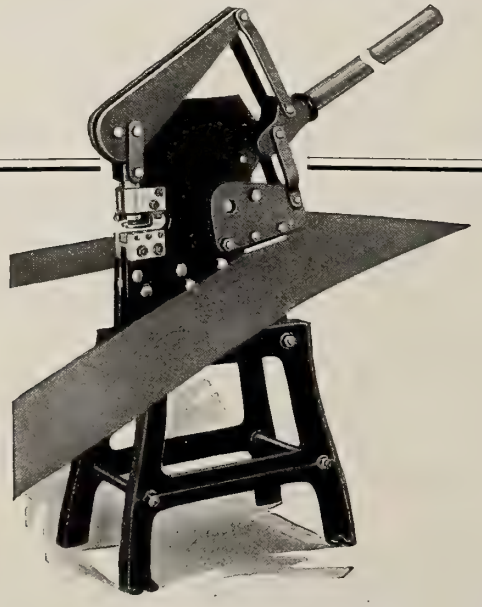
This frame construction consists of a rolled steel plate having a tensile strength 7½ times that of cast iron. This strength permits of a machine much lighter and more compact than s possible with either cast iron or cast steel.

Let us know what your punching and shearing requirements are. We have an "Armor Plate" machine for the service. Remember our Armor Plate Line comprises power operated machines as well as hand power.

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Bank Clearings

Moncton the only City to Show an Increase during Month of November.

For the month of November Moncton alone of 26 cities reported an increase in bank clearings. The total decrease was $367,600,452 or 18.2% from last year. In the East the decline was $205,495,539, equal to 19.3%. In the West the clearings were 24.7% lower than last November, Winnipeg's loss being 23.5% and Vancouver's 21.01. Calgary showed the heaviest decrease, both in the West and in the Dominion at 50.3%. Following are the figures for the 26 cities, with comparisons:—

EASTERN BANK CLEARINGS

	Month of November	Increase over '20	Inc P.C.
Toronto	$484,870,224	x$ 9,945,472	1.9
Montreal	506,188,587	x146,658,118	22.4
Ottawa	40,606,940	x17,247,139	30.9
Hamilton	25,409,422	x7,851,886	23.6
Quebec	25,476,998	x10,799,797	29.7
Halifax	18,061,158	x5,751,113	24.1
St. John	13,466,948	x830,806	5.8
London	13,924,009	x3,056,239	17.9
Windsor	14,090,470	x1,422,071	9.1
Kitchener	4,905,336	x489,824	9.07
Moncton	4,587,731	744,093	19.3
Sherbrooke	3,857,359	x1,810,994	31.9
Peterboro'	3,571,519	x824,173	18.7
Total	$1,158,470,701	x$205,493,539	15.06
Kingston	3,425,799		

WESTERN BANK CLEARINGS

	Month of November	Increase over '20	Inc P.C.
Winnipeg	$321,081,483	x$99,100,650	23.5
Vancouver	59,434 687	x15,807,944	21 01
Calgary	24,053 282	x24,354,259	50.3
Edmonton	25,018,310	x2,969,907	10.6
Regina	20,323,111	x5,578,217	21.4
Saskatoon	10,250,949	x2,417,998	19 09
Victoria	9,416,088	x2,302,351	19.6
Ft. William	4,089,614	x1,026,793	26.1
Brandon	3,830,300	x857,849	18.3
Moose Jaw	7,722,677	x3,163,708	29.06
Lethridge	3,003,727	x2,344,256	43.8
N. Westminster	2,454,037	x691,008	21.9
Medicine Hat	1,873,275	x1,511,982	44.6
Total	$492,511,540	x$162,106,913	24.7
Total Estimate	$1,158,470,701	x$205,493,539	15.06
Grand Total	$1,650,982,241	x$367,600,452	18.2

xDecrease.

December Bank Clearings

Almost without exception the bank clearings in the principal cities of Canada, both in the month of December and for the year 1921, showed substantial decreases, indicating the contraction in business that has been going on for several months past.

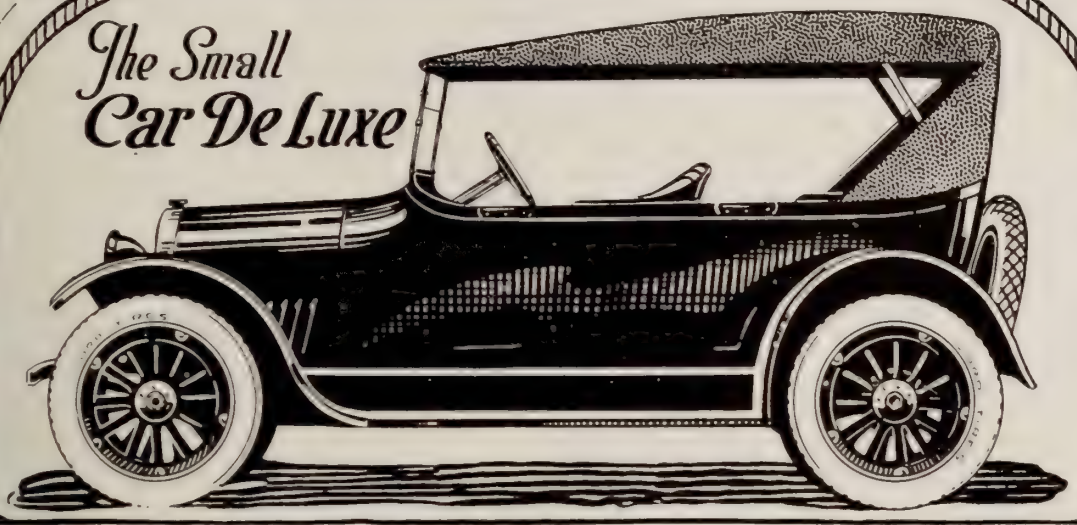
Clearings in Toronto for December, which amounted to $464,721,741, indicated a decrease of $36,601,892 from the level of the similar month a year ago, while the total for the year at $5,104,693,766, was $305,521,036 less than in 1920.

Montreal's December clearings amounted to $532,331,302, a decrease of $58,429,152 from December a year ago. The total clearings in Montreal in 1921 amounted to $5,720,258,173, which was $1,388,930,868 less than in the year 1920.

The bank clearings for December compare as follows:

City—	Dec., 1921.	Dec., 1920
Halifax, N. S.	$ 15,136,915	$ 19,950,866
St. John, N. B.	12,539,863	14,161,893
Moncton, N. B.	4,255,525	3,886,152
Quebec, Que.	24,348,195	32,565,553
Sherbrooke, Que.	3,742,202	5,630,313
Montreal, Que.	532,331,302	590,760,454
Ottawa, Ont.	36,441,913	47,220,857
Kingston, Ont.	3,767,216	
Peterboro, Ont.	3,645,293	4,422,908
Toronto, Ont.	464,721,741	501,323,633
Hamilton, Ont.	24,904,899	31,774,421
Brantford, Ont.	5,006,172	7,394,518
Kitchener, Ont.	4,563,887	5,193,175
London, Ont.	14,644,090	15,127,876
Windsor, Ont.	13,610,688	15,906,848
Fort William	4,036,532	5,023,226
Winnipeg, Man.	269,626,797	403,833,417
Brandon, Man.	3,499,280	4,150,418
Regina, Sask.	19,229,502	22,456,612
Moose Jaw, Sask.	7,064,998	9,654,142
Saskatoon, Sask.	9,119,521	10,730,512
Prince Albert		2,222,769
Lethbridge, Alta.	3,179,239	4,465,827
Medicine Hat	1,898,946	2,776,853
Calgary, Alta.	26,791,758	41,116,330
Edmonton, Alta.	23,062,906	26,103,653
New West. B. C.	2,533,025	3,118,277
Vancouver, B. C.	58,571,898	81,174,710
Victoria, B. C.	10,577,540	11,565,350

CHEVROLET



New "Four-Ninety" Special

$895 f.o.b. Oshawa
Sales Tax Extra

A new model especially designed for motorists who want all the refinements of big cars combined with Four-Ninety reliability and economy.

Special features include—Nickel Plated Radiator, Cord Tires, Bumper, Newly Designed Body specially painted with a neat stripe. Special Top with Gipsy Curtains and Side Curtains opening with Doors, Gasoline Tank on rear with Vacuum Feed, New Springs and Spring Hood Fasteners.

All 1922 "490" models have new rear axle with spiral cut steel gears, separate new emergency brake lever, Timkin bearings in front wheels, with other improvements.

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MOTOR COMPANY OF CANADA, LIMITED

DIVISION OF GENERAL MOTORS OF CANADA LIMITED OSHAWA, ONT

The Employment Situation

General Trend of Curve is Upward but Changes are only Slight

The general trend of the employment curve is upward, but little change is shown. For the fortnight ended October 22, the index number rose to 90.4 as compared with 89.9 for the preceding two weeks and with 106.1 for the corresponding period of 1920. For the fortnight ended November 6th, the index number fell to 90 2 as compared with 104.4 at the same date in 1920.

Increased employment is reported in the pulp and paper industry and in printing and publishing. Tables showed advances on a moderate scale. Important contractions were reported in iron and steel products.

Trades unions reported a further slight increase in activity at the beginning of November, when the percentage of employment stood at 92.6, as compared with 91.5 at the beginning of October, and with 93.9 at the beginning of November, 1920.

Planing Mill Fire

Plant of Reid & Company, Toronto, Damaged to the Extent of $50,000

The planing mill, lumber piles and manufactured lumber of Reid & Company, Toronto, were damaged to the extent of $50,000 by a fire which broke out there the night of December 7th. Although the firemen had the blaze under control within an hour a two storey galvanized iron building containing $35,000 worth of machinery and a quantity of lumber was destroyed. The cause of the fire is thought to be a careless smoker.

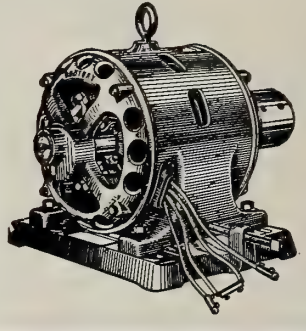
Twenty-five thousand dollars damage was caused to the building, machinery and stock of the Canada Western Woollen Mills, Vancouver, by a fire of unknown origin that occurred on October 7. The blaze broke out in the basement of the plant and smouldered for several hours in the large stock of woollen blankets. The motors and weaving machines suffered the most damage.

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EDWARD MAYBEE, Mech. Eng. J. F. EDGAR, Counsel
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Steel Ingots and Castings

Production during Month of November was Fairly Well Maintained.

The production of steel ingots and castings in November showed a decided improvement, the output rising from a high record of 72,204 long tons in October to a total of 75.039 long tons in the month just closed. Of the November output, 73,806 tons was made by the producers for their own use—mostly in the manufacture of steel rails. A small amount was produced for direct sale, the total under this item being 1,233 long tons, practically all of which was in the form of steel castings.

Basic open hearth castings amounted to 716 tons; bessemer, 81 tons: and electric steel, 584 tons. Steel ingots produced by the makers for their own further use were made almost entirely by the basic open hearth process, only 41 tons being credited to other processes, chiefly electric. Very small quantities of steel ingots were produced for direct sale.

The favourable turn in the steel making industry noted in the October report continued throughout November, although the principal activities reported were in the manufacture of steel ingots for further use in manufacturing processes. While, therefore, a considerable increase was noted in the output, the field of production remained somewhat limited. It has been, nevertheless, a matter of some satisfaction that there has been considerable improvement in at least one section of the steel trade, and the general expectation is that the field will broaden and that the other branches of the industry will show improvement in the near future.

Pig Iron

Decided Improvement Shown In Record of Production during November.

The production of pig iron during November was fairly well maintained, the total output of basic iron amounting o 41,232 long tons as compared with 42,356 tons in the preceding month. With the exception of some 300 tons, the whole output was produced by makers for their own further use. Foundry iron fell off slightly from 7,217 tons in October to 6,384 tons in November, practically all of which was produced for sale. Nn malleable iron has been made in Canada since August and no electric castings have been made since September. The quantity of the last-named commody produced, however, is always small and is entirely the product of electric furnaces. No electric iron was made in either October or November, but contracts awarded for the manufacture of rails kept two furnaces in operation at Sault Ste. Marie, and two more at Sydney, while the varied interests of The Steel Company of Canada permitted of the operation of one blast furnace at Hamilton. These five furnaces, all of which were in blast at the beginning of the month, were the only units operated during the period.

The output of ferro-alloys showed a creditable increase from 1,266 tons in October to 1,683 tons in November, in spite of the fact that only two plants were in operation. No spiege-leisen was made during the fonth, the output of ferro-alloys consisting entirely of ferro-silicon in grades from 15% to 75%.

While the output of pig iron and ferro-alloys in Canada during November was not up to the monthly average established for the year, the production reflected a little of the stability looked for in the iron trade and confirmed the opinion expressed in the October report that the output of iron would be well maintained throughout the closing months of the year.

The Season's Greetings

Cards and Calendars from Many Firms with Christmas and New Year Messages

The usual greetings appropriate to this season of the year have reached *Industrial Canada* from a number of firms. Willys. Overland Limited, Toronto, send a card of artistic design printed in black and gold. Holly red and green are the colours on the card sent by the Jack Canuck Publishing Company, Toronto. The Acton Publishing Company, Limited, Toronto, and Superior Engravers, Limited, Hamilton, have got out cards that are excellent examples of their respective crafts. The Royal Arms of Canada are the feature of the Christmas card sent out by the Department of Colonization and Development of the C. P. R. Lockwood, Greene & Company of Canada, Limited, have published their usual handsome calendar, containing photographs of buildings recently erected by them. The Canada Printing Ink Company, Limited have also issued a large wall calendar.

W. S. Fisher, president of the C. M. A., sends a card bearing the crest of the Association and a cordial greeting for 1922. J. H. Fortier, chairman of the Quebec Division ,also sends a card with his good wishes.

Changes in Directorate

W. M. Gartshore Succeeds Late John McClary as President of McClary Manufacturing Company

At the meeting of the directors of The McClary Manufacturing Company, London, Ontario, held at their Head Office on December 28th, W. M. Gartshore was appointed president and general manager, and A. M. Smart, vice-president and treasurer. The vacancy on the board, caused by the death of the late presidwent of the company, John McClary, was filled by the appointment of T. G. Meredith, K.C.

It is the intention of the Directors, at the next meeting, to pass a by-law appointing another vice-president in the person of John McClary Gunn, assistant general manager.

The directors of the company now are: W. M. Gartshore, A. M. Smart, John McClary Gunn, John McClary Moore, T. G. Meredith, K.C.; with J. K. H. Pope, as secretary of the company.

Compact Facts

Natural Resources Intelligence Branch, Issues Booklet o Information about Canada

The Natural Resources Intelligence Branch of the Department of the Interior, has just issued a revised edition of "Compact Facts," which contains in concise form, information regarding Canada; its area, population, trade and industries; their extent, capital invested, wages paid, values of live stock, principal crops and amounts produced; mineral resources and present production; also forest resources and forest products. Copies of the booklet are available on application to the Superintendent, Natural Resources Intelligence Branch, Department of the Interior, Ottawa.

Underfeed Stoker Bulletin

New Product Announced by Underfeed Stoker Company of Canada, Limited

The Underfeed Stoker Company, of Canada, Limited, Toronto, have issued a bulletin describing and illustrating an entirely new type of underfeed stoker. This equipment is known as the Jones Standard Side-Dump Stoker, and is designed to meet the demands of many plants for a simple, inexpensive, self-cleaning stoker. It embodies a number of special features besides the basic principles of the Jones stokers.

Publish Map

Principal Natural Resources, Railways and Trade Routes of Provinces are Shown

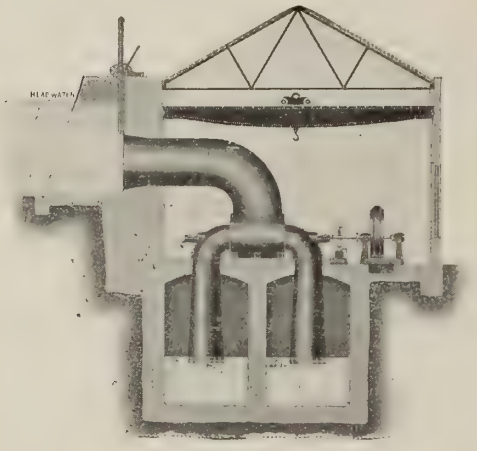
The Natural Resources Intelligence Branch of the Department of the Interior has issue da map howing the principal natural resources of each province of Canada. In addition all railways and trade routs are shown and a series of comparative diagrams illustrates the production and export of the provinces. Copies of the map may be obtained free of charge on application to the Natural Resources Intelligence Branch. Department of the Interior Ottawa.

Issue New Bulletin

Hydraulic Machinery Company, Limited, Advestising Made-in-Canada Pressing Equipment.

The Hydraulic Machinery Company, Limited, Montreal, who manufacture the Hymac line of packing house and fertilizer machinery, have issued their Bulletin "X" in which several varieties of pressing equipment are described. The numerous hydraulic presses are clearly illustrated by half-tone reproductions of drawings and photographs. All the products are entirely Made-in-Canada.

William Hamilton Company
LIMITED
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Hydraulic Turbines, Pulp Mill Machinery
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Deaths Among Prominent Manufacturers

Nathan H. Stevens

Founder and Ex-President of the Canada Flour Mills, Limited Chatham, Ontario

Death has removed another prominent industrial leader in the person of Nathan H. Stevens, founder of the Canada Flour Mills, Limited, Chatham, Ontario. Mr. Stevens was born near Bowmanville in 1841 and moved to Harwich Township, Kent County, in 1853. In 1867 he purchased a general store at Blenheim and later had an interest in the planing mill there.

He came to Chatham a year later, where, in partnership with Archie and John Campbell, he built the Kent Mills, the first roller flour mills in Canada. The company controlled mills at Blenheim, St. Thomas and Aylmer, in addition to a line of elevators throughout Western Ontario. The business was incorporated in 1900 under the name of the Canada Flour Mills, Limited, with Mr. Stevens as president. He continued as head of the firm until about two years ago, when he retired from active business.

In addition to the milling business the late manufacturer was connected with many other business institutions. He was president of the Standard Reliance Mortgage Corporation, Toronto and of the Blonde Lumber Company, Chatham; vice-president for several years of the Sutherland, Innes Company, Chatham; one of the first directors of the Erie & Huron Railway; and on the directorate of many other important business corporations.

Civic activities and sports also had their share in Mr. Steven's life. He served on the Board of Education and the City Council of Chatham and was a Justice of the Peace for many years. In 1904, at the age of 63, he toured the British Isles, as a member of the Canadian lawn bowling team. His active mind, keen sense of humour and open-hearted hospitality endeared him to all with whom he came in contact, and many business men in Canada will join with the citizens of Chatham in grief for his loss.

John McClary

Founder and President of the McClary Manufacturing Company, Limited, London, Ontario

By the death of John McClary, founder and president of McClary Manufacturing Company, Limited, London, Ontario, Canada loses one of her oldest and greatest manufacturers. The story of his career is the history of a great industry's development in the face of many difficulties towards the success and esteem merited by the great qualities of its leader.

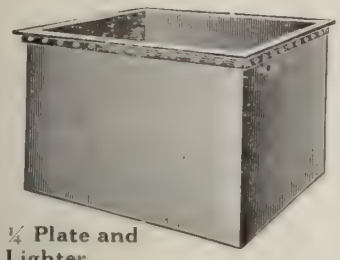
John McClary was born near London in 1829, and nearly all of his 92 years were spent in that city or its vicinity. In his early life on his father's farm he learned the trade of tinsmithing. The gold rush of 1849 attracted him to try his fortunes in California but after a year of hardship and peril in prospecting he returned home, convinced that Ontario had as much to offer as the Pacific slope.

On his return he resumed his former trade, starting a small shop along with his brother, the late Oliver McClary. The enterprise was a hazardous one, as they had little capital and it was extremely difficult for small manufacturers of those days to obtain raw material. Courage, determination and hard work finally won the battle, and from the little wooden shop on York Street grew the great industry of to-day which has branches in all parts of the world.

He was a true friend to his workmen, carrying out his high principles of humanity in all his business relations. One of his regrets in later years was that the growth of his business made personal contact with all his employees impossible. When a large part of the McClary plant was burned in 1902, his first question was in regard to the safety of the men.

Besides being president of the McClary Manufacturing Company, Mr. McClary was at the time of his death president of the Ontario Loan and Debenture Company, a director of the London and Western Trusts Company and a past president of the London Life Insurance Company.

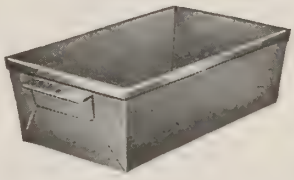
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Welded Steel

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Welded Steel

Tanks of all kinds, round, square, oblong, large or small, heavy or light. Smoke Stacks etc.



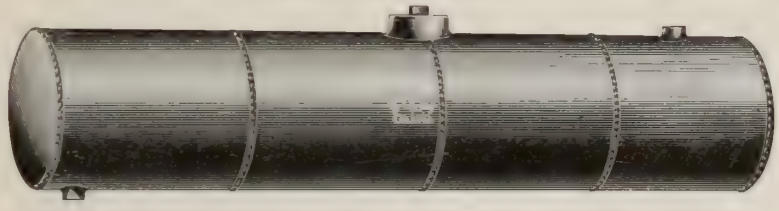
Oil and Gas Tanks



Shop Barrels



Steel Foundry Ladles

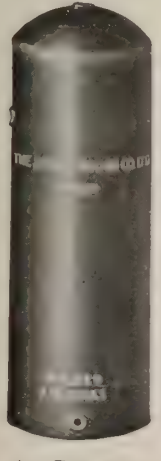


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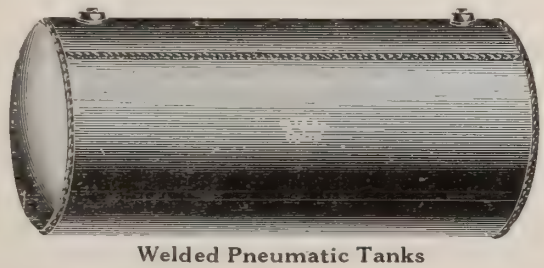


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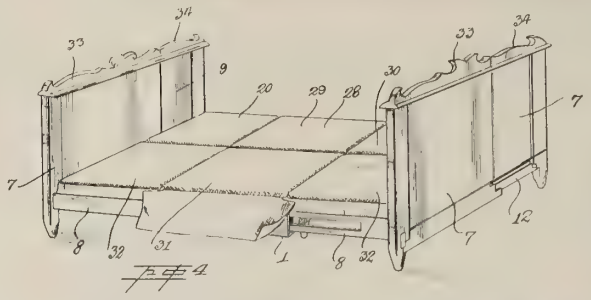


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Thomas Findley

President of the Massey-Harris Company, Limited, Dies at age of Fifty-one

Thomas Findley, president of the Massey-Harris Company, Limited, died in Toronto on December 19th. He had been in poor health for the past five years, and for the past year his condition had been serious.

Mr. Findley's career, though comparatively short, as he was only fifty-one years old at the time of his death was very distinguished. Born on a farm at Sutton, Ontario, in 1870, he remained there until he was sixteen years old, acquiring such education as the limited facilities of the village school afforded. His own efforts and ambition were responsible for his advancement from that time on. Working in a general store he managed to pick up a knowledge of telegraphy, which in 1890 secured him a position with the Massey-Harris Company.

With them his rise was rapid. In 1895 he became chief accountant, in 1902 assistant to the president, in 1907 assistant general manager, in 1909 director, in 1912 vice-president, and in 1917 president and general manager. Ill health forced him to resign from the managership over a year ago, but until within a few weeks of his death he was a regular attendant at his office.

His connection with the Massey-Harris Company largely contributed to their success. Not only did his business acumen do much to direct their policy on profitable lines, but he was also responsible for the internal unity and harmony of the industry. He was one of the leaders of the humanitarian movement in Canadian industry, and his schemes for the maintenance of good-will between employer and employee represent the most advanced ideas upon the problems of industrial relations that have yet been put into operation. These included reduced working hours, increased pay, free medical attention, old age pensions and recreational facilities. He established a workmen's council for the adjustment of employees' grievances, and at the time of his death was trying to solve the problem of providing for dependents of employees dying before they should have amassed a competence for their families.

Mr. Findley was also president of the Bain Wagon Company, Woodstock, Ontario, director of the Verity Plow Company, Brantford, director of the National Trust Company, vice-president of the Toronto Housing Company and a director of the Johnson Harvester Company, Batavia, New York.

John James Cunningham

President of Western Foundry Company, Wingham, Ontario, Dies Suddenly in Toronto

John James Cunningham, president of the Western Foundry Company, Limited, Wingham, Ontario, died suddenly while spending Christmas in Toronto. The late manufacturer was born in Toronto 57 years ago and for several years has been prominent in the industrial life of the province. He was one of the founders and the first president of the Gurney Foundry Company, but relinquished his connection with that concern about eighteen years ago to acquire the controlling interest in the Wingham Company.

Thomas Robert Atkinson

Managing Director of Norfolk Evaporating & Preserving Company, Limited, Simcoe

Thomas Robert Atkinson, managing director of the Norfolk Evaporating & Preserving Company, Limited, and a former M. P. P. for North Norfolk, was found dead at his home in Simcoe, Ontario, on December 11th. His death was due to heart trouble for which he had been under treatment for some time.

Mr. Atkinson was born in Wentworth County in 1858, and received his education at Simcoe High School, Queen's University and Osgoode Hall. He was called to the Bar in 1896, but gave up practising on becoming connected with the Norfolk Evaporating & Preserving Company. He was also a director of the London & Western Trust Company. He was mayor of Simcoe in 1895 and 1896 and was elected to the Legislature in 1905, 1911 and 1914.

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Ocean Shipping News

Steamship Sailings

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MONTCOLM (Cold Stge)	Can. Pac. S.S. Ltd.	Ab't Feb. 1
*CANADIAN EXLORER	C. G. M. M. Ltd.	Ab't Feb. 8
MELITA (Cold Stge)	Can. Pac. S.S. Ltd.	Ab't Feb. 17
MONTCALM (Cold Stge)	Can. Pac. S.S. Ltd.	Ab't Mch. 2
MINNEDOSA (Cold Stge)	Can. Pac. S.S. Ltd.	Ab't Mch. 10

To London

BOSWORTH (Sirocco Fans)	Can. Pac. S.S. Ltd.	Ab't Jan. 19
HASTINGS COUNTY	I. C. Transports Ltd.	Ab't Jan. 21
LISGAR COUNTY	I. C. Transports Ltd.	Ab't Jan. 23
COMINO (Sirocco Fans)	Furness Line	Ab't Jan. 28
*CANADIAN TRAPPER	C. G. M. M. Ltd.	Ab't Feb. 1
WISLEY	I. C. Transports Ltd.	Ab't Feb. 6
BATSFORD (Sirocco Fans)	Can. Pac. S.S. Ltd.	Ab't Feb. 8
*CANADIAN RAIDER (Cold Stge)	C. G. M. M. Ltd.	Ab't Feb. 15
BOLINGBROKE (Sirocco Fans)	Can. Pac. S.S. Ltd.	Ab't Feb. 18
DUNBRIDGE (Sirocco Fans)	Can. Pac. S.S. Ltd.	Ab't Mch. 1
BOSWORTH (Sirocco Fans)	Can. Pac. S.S. Ltd.	Ab't Mch. 11

To Glasgow

*CANADIAN OTTER	C. G. M. M. Ltd.	Ab't Jan. 21
TUNISIAN (Cold Stge)	Can. Pac. S.S. Ltd.	Ab't Jan. 28
PRETORIAN (Cold Stge)	Can. Pac. S.S. Ltd.	Ab't Feb. 22
TUNISIAN (Cold Stge)	Can. Pac. S.S. Ltd.	Ab't Mch. 4

To Avonmouth

BOTHWELL (Sirocco Fans)	Can. Pac. S.S. Ltd.	Ab't Feb. 17

To Cardiff and Swansea

*CANADIAN NAVIGATOR	C. G. M. M. Ltd.	Ab't Feb. 4

To Manchester

MANCHESTER HERO	Manchester Line	Ab't Jan. 21

To Southampton and Antwerp

CORSICAN (Cold Stge)	Can. Pac. S.S. Ltd.	Ab't Jan. 31
SCANDINAVIAN (Cold Stge)	Can. Pac. S.S. Ltd.	Ab't Feb. 18

To Havana, Cuba and Kingston, Jamaica

¶SICILIAN (Cold Stge)	Can. Pac. S.S. Ltd.	Ab't Feb. 2

¶Via Boston.

To Havre

LISGAR COUNTY	I. C. Transports Ltd.	Ab't Jan. 23
WISLEY	I. C. Transports Ltd.	Ab't Feb. 6

To Italian Ports

‡CASERTA	Can. Pac. S.S. Ltd.	Ab't Feb. 9

‡Naples and Genoa. Via Boston.

To Australian and New Zealand Ports

AUSTRALIND	New Zealand S.S. Ltd.	Ab't Jan. 31

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A STEAMER	Elder Dempster Line	Ab't Jan. 31

FROM ST. JOHN, N.B. AND HALIFAX, N.S.

To Bermuda and British West Indies

	From St. John, N.B.	From Halifax, N.S.
CHIGNECTO R.M.S.P.Co.	Ab't Jan. 8	Ab't Jan. 20

To St. John's (Newfoundland)

MAPLEDAWN	Canada Steamship Line	Ab't Jan. 19
MAPLEDAWN	Canada Steamship Line	Ab't Feb. 4

*Sail from St. John.

FROM HALIFAX

To Liverpool

¶DIGBY	Furness Line	Ab't Jan. 28

¶Via St. John's, Nfld.

To Glasgaw

GRACIA (Sirocco Fans)	Anc. Don. Line	Ab't Jan. 18

To Barbados, Trinidad and Demerara

CANADIAN COASTER	C. G. M. M. Ltd.	Ab't Jan. 17
CANADIAN BEAVER	C. G. M. M. Ltd.	Ab't Jan. 27
CANADIAN LOGGER	C. G. M. M. Ltd.	Ab't Feb. 10

To Nassau (Bahamas), **Kingston** (Jamaica) **and Belize**

CANADIAN FORESTER	C. G. M. M. Ltd.	Ab't Feb. 3
CANADIAN FISHER	C. G. M. M. Ltd	Ab't Feb. 24

To Rio de Janeiro, Santos (Brazil), **Montevideo and Buenos Aires**

CANADIAN RANGER	C. G. M. M. Ltd.	Ab't Feb. 11

To Australian and New Zealand Ports

CAN. CONSTRUCTOR (Cold Stge)	C. G. M. M. Ltd.	Ab't Jan. 25
CANADIAN MILLER	C. G. M. M. Ltd.	Ab't Feb. 22

To St. John's (Newfoundland)

CANADIAN MINER	C. G. M. M. Ltd.	Ab't Jan. 19

To Santiago, Cuba, Kingston, Montego Bay, St. Ann's Bay, Jamaica

NEVIS	Pickford & Black Ltd.	Ab't Jan. 18

To Guantanamo, Santiago, Manzanillo, Cuba and Kingston, Ja.

CALEDONIA	Pickford & Black Ltd.	Ab't Feb. 1

From Halifax, N.S., to St. John's (Newfoundland)

ROSALIND	Red Cross Line	Ab't Jan. 19

White Star — Dominion Line



S.S. "DORIC" (16,500 tons)

Regular Passenger and Freight Service between

MONTREAL — QUEBEC — LIVERPOOL
PORTLAND, ME. — HALIFAX, N.S. — LIVERPOOL
MONTREAL — AVONMOUTH (Bristol)
PORTLAND, ME. — AVONMOUTH (Bristol)

Steamers

LAURENTIC (Bldg.) MEGANTIC, DORIC, CANADA, REGINA, DOMINION, RIMOUSKI, WELSHMAN, TURCOMAN, CORNISHMAN
(Cold Storage and Fan Ventilation)

For full particulars apply to

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QUEBEC, P.Q.

J. W. WILKINSON,
1008 Royal Bank Building,
TORONTO

OR ALL RAILWAY AGENTS

ELDER DEMPSTER LINES

Canada-South Africa Direct Service

Regular monthly sailings from Montreal in Summer and St. John, N.B., in Winter, calling at Cape Town, Algoa Bay (Port Elizabeth), East London, Port Natal (Durban) and Delagoa Bay in the order named.

Canada-West Africa Direct Service

From Montreal in Summer, and from St. John, N.B., in Winter, monthly sailings for Dakar, Sierra Leone, Seccondee, Accra and Lagos, and other ports on the coast, if sufficient inducement offers.

For Sailings, Rates of Freight and Full Particulars, apply to

ELDER DEMPSTER & CO. LIMITED

133 Board of Trade Building
Montreal

Toronto Agent, S. J. Sharp, 79 Yonge St.
Royal Bank Building

MACDONALD MFG. CO., Limited
Toronto - Canada

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PLAIN and LITHOGRAPHED CONTAINERS
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Jam	Lard
Fruit	Oil
Vegetables	Paint
Meat	Varnish
Syrup	Tobacco
Butter	Talcum
Biscuits	Tea

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Druggists' Sundries
Also Toys, Novelties, Tags and Advertising Signs

Well packed is half sold
Make your containers advertise you

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Shurly & Derrett
Limited
TORONTO



Manufacturers of
TWINES
Mill and Spindle
Binding, Etc., Etc.

Oil Burners Increase

Lloyd's Register of Shipping Shows that Oil Fuel is Replacing Coal.

In view of the fact that the new Canadian Pacific steamships, the *Montcalm*, *Montrose* and *Montclare*, which will be in the Montreal-Liverpool Services next year, are the most modern type of oil burners, it is interesting to note in the annual report of Llyod's Register of Shipping the remarkable increase in the use of oil fuel to replace coal, as illustrated by the following comparative figures recorded in the Register:

	Vessels burning oil fuel, gross tons.
July, 1914	1,310,209
July, 1919	5,336,678
July, 1920	9,359,334
July, 1921	12,796,635

It is stated that the position indicates that industrial conditions generally during and subsequent to the war have given tremendous impetus to this important economic movement. Some impression of the industrial significance of the change will be obtained when it is realized that the steamers now in existence which are fitted for oil fuel would represent a consumption of coal approaching 20,000,000 tons per annum, or about 8.7 per cent. of the quantity of coal brought to the surface in the United Kingdom during 1920.

Apart from the question of the relative cost of coal and oil as fuel, there is undoubtedly, in the case of vessels using the latter, an all-round economy of labor, bunker space, accommodation for crew, and time in port; factors which have an important bearing on running costs, more especially in the case of passenger steamships of the type represented by the *Montcalm* and her sister ships and the *Empress of Britain*.

Canadian Pacific Steamships

Four New Ships Are Placed on the Atlantic by 1922 Summer Sailing Schedule.

Interesting changes in the Atlantic services of the Canadian Pacific Steamships, Limited, are indicated in the 1922 Summer Sailing Schedule issued by the Company. Four new ships, the *Empress of Scotland*, *Montcalm*, *Montrose* and *Montclare*, will be operated on the St. Lawrence for the first time; a new service with the Company's largest steamships will be inaugurated between Quebec and Southampton and ships which are already well known will be transferred to routes other than those on which they have hitherto operated.

The new Quebec-Havre-Southampton route will be maintained by the 25,000 ton *Empress of Scotland* and *Empress of France*. The former will leave Quebec on the new schedule on May 4. The latter will reach Quebec on May 10 and sail again on May 16. The *Empress of Britain* will make two trips to the West Indies this winter and will make her first trip of the summer season from Quebec to Liverpool on May 26.

The Montreal-Liverpool service will be maintained by the three "M" ships, *Montcalm*, *Montrose* and *Montclare;* the Montreal-Southampton-Antwerp service, by the *Melita* and *Minnedosa;* and the Montreal-Glasgow run, by the *Metagama*. *Corsican* and *Tunisian*. The routes to be assigned the other steamships of the Canadian Pacific Atlantic fleet will be announced later.

New Cuban Service

Regular Sailings Inaugurated by Canadian Pacific Steamships between Havana and St. John.

The arrival of the *S.S. Sicilian* of the Canadian Pacific Steamships, Limited, at Havana, on December 13th, inaugurated a regular passenger and freight service between that port and St. John, New Brunswick. Boston will be a port of call each trip.

It is hoped that in the near future arrangements will be made to extend or connect this new Canadian Pacific service to Mexican ports, which are growing very important both to Canada and to Cuba.

CANADIAN PACIFIC

STEAMSHIPS LIMITED



Passenger Services *Freight Services*

by the World's Greatest Transportation System

Trans-Atlantic

Montreal and Quebec (Summer) and West St. John, N. B. (Winter) ***to*** Liverpool, Glasgow, Southampton Cherbourg, Hamburg, Antwerp

Additional Freight Services to Avonmouth (Bristol) and London

Cuba-Jamaica Service

West St. John and Boston to Havana and Kingston

Italian Service

Combined service to Italy, Canadian Pacific and Navigazione Generale, to Naples and Genoa.

Trans-Pacific

Quickest Across the Pacific

Vancouver and Victoria ***to*** Yokohama, Kobe, Moji, Nagasaki, Shanghai, Manila, Hong Kong

Through Bills of Lading Issued to All Ports

Canadian Pacific Railway Co.

Traffic Agents.

Bureau of Canadian Information

Ask the Canadian Pacific about Canada

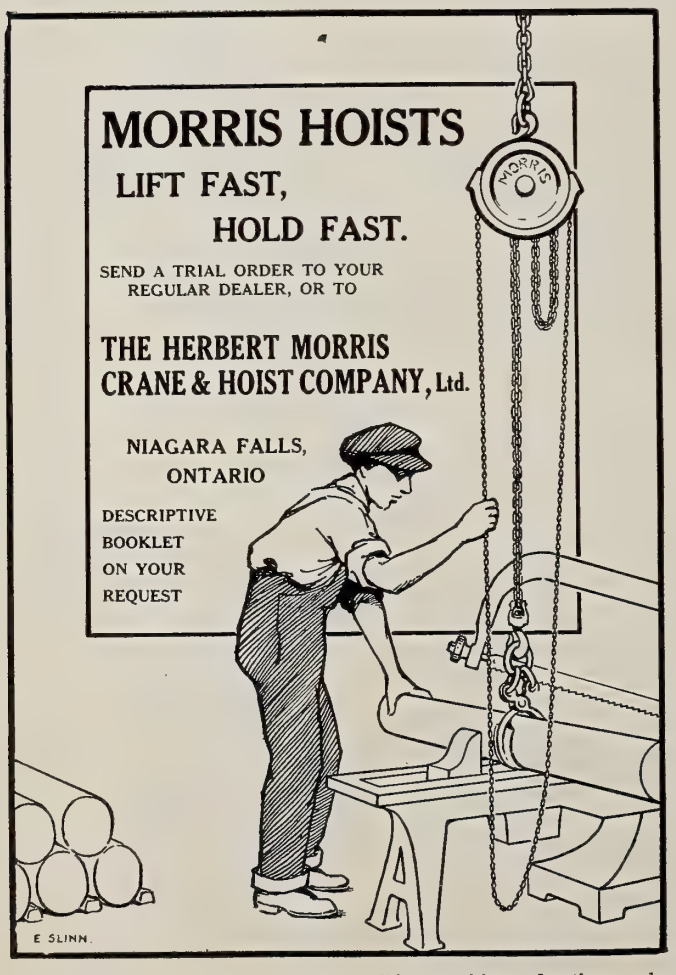
CANADIAN PACIFIC RAILWAY

THE CANADIAN PACIFIC RAILWAY, through its Bureau of Canadian Information, will furnish you with the latest reliable information on every phase of industrial and agricultural development in Canada. In the Reference Libraries maintained at Montreal, Chicago, and New York are complete data on natural resources, climate, labor, transportation, business openings, etc., in Canada. Additional data is constantly being added.

No charge or obligation attaches to this service. Business organizations are invited to make use of it.

CANADIAN PACIFIC RAILWAY
Department of Colonization and Development

165 E. Ontario St. Chicago — 335 Windsor Station Montreal — C. P. R. Bldg., Madison Ave. at 44th St., New York



Trip to West Indies

Executive of C. M. A. Arranging Party to Visit this Market in February.

The question of organizing a party to visit the British West Indies this winter has been thoroughly discussed and approved by the Executive Council of the C.M.A., and circulars are being sent out to members to find out how many are willing to join the expedition. The new preferential tariff agreement makes the study of the field particularly desirable, and is felt that Canadian manufacturers will derive both pleasure and profit from a personal examination of conditions in this important market.

The Canadian Government Merchant Marine, the Royal Mail Steam Packet Line and the Quebec Steamship Company are co-operating with the Association and will do everything in their power to make the trip a successful one. A representative of the Canadian Government Merchant Marine will accompany the party and assist members in making their transportaion arrangements. As the party will be semi-official in character the Executive Council feel that the Association should be represented by the heads of manufacuring firms rather than by their salesmen. The party will meet official representatives and members of the various business organizations in the countries visited, and will discuss with them a variety of trade problems.

The proposed itinerary is as follows:—

Leave Halifax February 17th via Royal Mail Steam Packet Line S.S. *Chaudiere;* Bermuda February 21st; St. Kitts February 25th; Antigua February 26th; Montserrat February 26th; Dominica February 27th; St. Lucia February 28th; Barbados March 1st; St. Vincent March 2nd; Grenada March 2nd; Trinidad March 3rd; Demerara March 5th.

After remaining in Demerara for four days, departure will be made on the 9th March, arriving at Trinidad on the 12th March via Royal Mail Steam Packet Line. From this point the steamer of the Quebec Steamship Company will be utilized touching the following islands in the Eastern group; St. Lucia, Martinique, Dominica, Guadeloupe, Antigua, St. Kitts, St. Croix, St. Thomas.

The trip from Demerara to St. Thomas occupies ten days, and members will have the option of stopping over at Trinidad one or two days. This would bring the party to the island of St. Thomas about March 24th. From St. Thomas to Kingston, Jamaica, via the islands of San Juan, Port Rico, San Domingo and Haiti, the service is irregular, but the party should arrive at Kingston, Jamaica about April 3rd. From Kingston, Jamaica, the S.S. *Canadian Forester* of the Canadian Government Merchnt Marine will transport the party to Halifax, stopping at Nassau en route. The trip Kingston to Halifax is made in ten days, allowing stop over of about twenty-four hours at Nassau.

Transportation expenses for the round trip from Halifax to the points mentioned and back to Halifax, including meals and berth on board ship, wll not exceed five hundred dollars (500.) per person. This, of course, does not include personal expenses, or expenses in port or ashore.

As arrangements must be completed at an early date, members intending to join the party are requested to notify the secretary of the C. M. A. as soon as possible

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New Steamer Tried

"Canadian Constructor" Proves Satisfactory on Trial Trip in Halifax Harbor.

Early this month the new C.G.M.M. steamer, *Canadian Constructor*, built by the Halifax Shipyards, Limited, was given her first trial in Halifax harbor. The results were entirely satisfactory. The ship was out three hours and maintained a speed of 12 knots. The vessel is an oil-burner.



CHATEAU FRONTENAC · QUEBEC

Historically, Quebec is the same, Winter or Summer. There are the same formidable walls with their reminders of bygone days. There are the same frowning cannons, that two hundred years ago belched forth fire and destruction. There are the same picturesque streets and quaint houses with their pointed gables, steep roofs, and off-looking windows. There are the same monuments, the same historical tablets with their reminiscent inscriptions, and there is always present the undeniable impression that nowhere on the whole Continent of North America is there a city that so calls up a picture of mediæval Europe as Old Quebec.

Just now, Quebec offers a delightful winter holiday, with a lively program of winter sports--tobogganing, snowshoeing, ski-ing, with expert Swiss ski instructor, ski-joring, skating, sleighing, etc. Crack dog team from the North country is another feature.

The Chateau Frontenac, the magnificent Canadian Pacific Hotel, on Dufferin Terrace, is the cheery, hospitable centre of a gay social life---Good orchestra and dancing.

For information, reservations, etc., apply to any Canadian Pacific Agent, or to W. B. Howard, District Passenger Agent,

Canadian Pacific Railway

1 KING STREET EAST, - - - TORONTO, ONTARIO.

CANADIAN-AUSTRALASIAN
Royal Mail Line

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HONOLULU, T.H. SUVA, FIJI
NEW ZEALAND AUSTRALIA

Monthly Sailings from VANCOUVER, B.C.

Largest, Newest and Best-Equipped Steamers to the SOUTH SEAS

FLEET

Passenger and Mail Steamers
R.M.S. "NIAGARA" (20,000 tons)
R.M.S. "MAKURA" (13,500 tons)

Freight Steamers
S.S. "WAIOTAPO" (10,000 tons)
S.S. "WAIRUNA" (8,900 tons)
S.S. "WAIKAWA" (9,000 tons)
S.S. "WAIHEMO" (8,900 tons)
S.S. "WAITEMATA" (8,900 tons)

For Fares, Freight Rates and Sailings apply to all Agents Canadian Pacific Railway, Canadian National Railway or other Railway and Steamship Agents, or to Canadian-Australasian Royal Mail Line, 741 Hastings St. West, Vancouver, B.C.

THE

New Zealand Shipping Company Limited

CANADA

TO

Australia and New Zealand

Regular monthly sailings from Montreal in summer and St. John in winter, calling at Auckland, Wellington, Lyttelton and Dunedin (New Zealand) and Melbourne and Sydney (Australia). Sailings 20th of each month.

Through bills of lading issued to all points in Australia, New Zealand, Tasmania and other islands of Oceania.

Marine Insurance effected at rates equal to those given from New York.

For rates and other information apply to

The New Zealand Shipping Co.
LIMITED

213 Board of Trade Building, Montreal

Recent Trade Enquiries

A list of Enquiries Received from Various Sources including the Canadian Trade Mission, London; the Canadian Trade Commission, Ottawa; the Department of Trade and Commerce, Ottawa; and the Commercial Intelligence Department, C. M. A., Toronto.

790. Cuba: A gentleman in Cuba, who presents good references as to his reliability and character, wishes to represent in Cuba, on a strict consignment and brokerage or salary basis, Canadian concerns anxious to sell their products in that market.

791. England: We have an inquiry from an English firm that wishes to secure agencies for machinery, hardware and agricultural implements.

792. Egypt: A firm in Alexandria, Egypt, are interested in importing the following products: flour, cheese, canned goods and dry goods.

793. South Africa: A South African firm of manufacturers' agents, who already represent a large Canadian manufacturer are desirous of securing a few additional agencies.

794. Leather: An Edinburgh firm of leather merchants, who handle all classes of leather goods and articles used in the manufacture or repair of boots, as buyers, and whose principal imports are sole leather, are willing to import anything from Canada in connection with the shoe trade, with the exception of boots and shoes.

795. Paper: A Glasgow papermaker's agent and merchant desires to secure an agency for a Canadian paper mill. This firm has branches in Edinburgh, London, Newcastle, Bristol and Johannesburg.

796. Refrigerators: A firm of Canadian agents located in Barbados, but who cover the whole of the West Indies, desire to obtain an agency for refrigerators. Catalogues and price lists would be required.

797. Engineering Supplies: A firm of engineering specialists in refrigerator plants and pumping machinery, in the Orange Free State, request particulars from Canada in the above lines, including compressors.

798. Hardware, Household Utensils: A Johannesburg firm of manufacturers' agents, covering all centres of the Union, wish to get in touch with Canadian manufacturers of hardware, household and general.

799. Underwear, and Hosiery: A Cape Town firm of commission agents covering all centres of the Union, request correspondence, with view to representation, from underwear and hosiery manufacturers prepared for export.

800. Wheelbarrows (steel): A Johannesburg firm handling truck and other agencies are prepared to take up for the Union of South Africa, the representation of a Canadian-made all-steel tubular wheelbarrow.

801. Hardware: A Glasgow firm of jobbers who say their imports from Canada are increasing as they discover new sources of supply, are in a position to compete with present American suppliers, and are open to consider any Canadian proposition put before them from manufacturers or exporters of small tools, machine tools, engineers' equipment, colliery furnishings; general ironmongery, iron and steel products and machinery; agricultural and mechanics' tools and wood manufactures.

802. Dairy Machinery and Material: A Johannesburg firm of dairy suppliers, who have good connections throughout the Union are open to purchase dairy machinery and material of all kinds for dairy plants.

803. Wood and China Studs: A Glasgow importer of buttons, braids, etc., requires now, small wood and china studs for laundries.

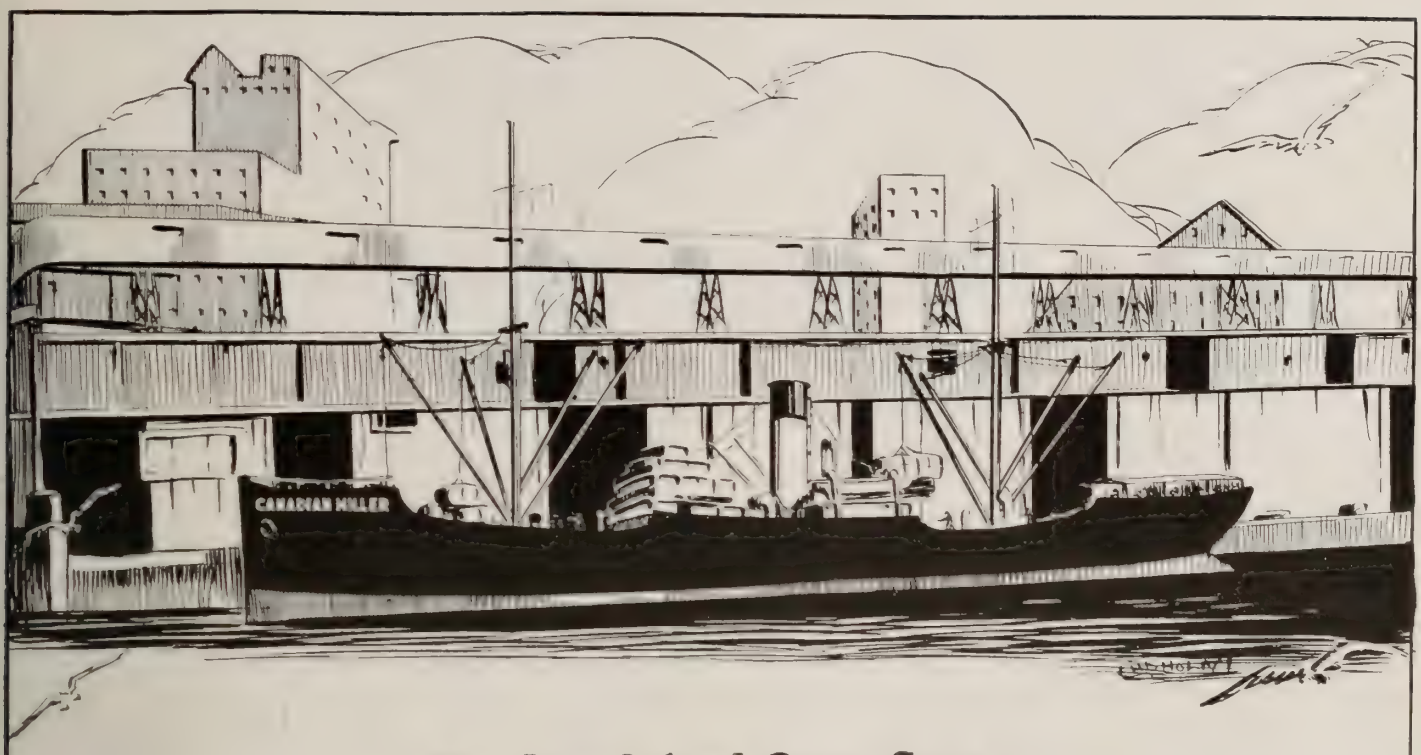
804. A New Zealand firm of importers and exporters would like to get in touch with Canadian manufacturers of lines suitable for the New Zealand market. A representative of the Company, who has recently arrived from New Zealand, is now stationed in Montreal, and will be glad to receive inquiries from any firms interested. Highest references are available.

Brussels Commercial Fair

Third International Exhibition of Manufactured Articles to be Held in April

The "Third Official Commercial Fair" will be held at Brussels from April 3rd to 19th, 1922, and applications for space, which may be obtained from the Consul General for Belgium, Ottawa, must be in the hands of the committee, 19 Grand Place, Brussels, not later than February 15th.

Exhibitors must be genuine manufacturers and producers or agents of firms exhibiting under the names of the firms they represent. The exhibits are restricted to products of allied and neutral countries who have entered the League of Nations.



On Land And Over Seas

The "National" Services

Railways *Steamships* *Express* *Telegraphs*

High-grade steel Passenger equipment of latest design on transcontinental trains; sleeping and dining car service that is unexcelled; from ocean to ocean and between all important points.

Freight trains to carry the products from the chief productive areas, and to market the manufactured goods. They reach, direct, all of the great ports in the Dominion.

Sixty ships, under the flag of ***Canadian Government Merchant Marine, Limited,*** are in service between Atlantic and Pacific coast points, in Canada and the chief ports abroad, engaged in the business of expanding Canada's foreign trade.

CANADIAN NATIONAL RAILWAYS

CANADIAN GOVERNMENT MERCHANT MARINE, LIMITED.

"The National Way"

Buyers' Guide to Canadian Manufactures

List of Articles which will Enable the Purchaser to Know the Manufacturers of Made-in-Canada Goods. Rates for insertion in this department, $4.00 per heading per year (12 insertions).

ABRASIVES
*Canadian Hart Wheels, Limited, Hamilton, Ont.
*Dominion Abrasive Wheel Co., New Toronto, Ont.
*Norton Company of Canada, Ltd., Hamilton, Ont.

ACCOUNT BOOKS
*The Brown Bros., Ltd., Toronto.

ACCUMULATORS, hydraulic
*The Hydraulic Machinery Co., Limited, Montreal.

ACETYLENE GAS
*The Prest-O-Lite Company of Canada, Ltd., Toronto, Ont.

ACETYLENE GAS BURNERS
Economic Acetylene Burner Co., Toronto, Ont.
*The Prest-O-Lite Company of Canada, Ltd., Toronto, Ont.

ACIDS
*The Grasselli Chemical Co., Ltd., Toronto.
*The Nichols Chemical Co., Ltd., Montreal, Que.

ADVERTISING NOVELTIES
Lawson & Jones, Ltd., London, Ont.

AERATED BEVERAGES
Charles Gurd & Co., Ltd., Montreal, Que.
J. J. McLaughlin, Ltd., Toronto.

AIR COMPRESSORS
*Canadian Ingersoll-Rand Co., Sherbrooke, Que.
*Smart-Turner Machine Co., Ltd., Hamilton, Ont.

AIR LIFT PUMPS
*Canadian Ingersoll-Rand Co., Sherbrooke, Que.

ALCOHOL
*Canadian Industrial Alcohol Company, Ltd., Montreal, Que.

ALKALIES
Brunner, Mond Canada, Limited, Amherstburg, Ont.

ALUMINUM
*Northern Aluminum Co., Ltd., 1805 Traders Bank, Toronto,

ALUMINUM COOKING UTENSILS
"Ideal" Aluminum Products. Ltd., Toronto.

AMMONIA
Canadian Ammonia Co., Ltd., Toronto, Ont.

ANCHORS, all steel
Beauchemin & Fils, Ltd., Sorel, Que.

ANGLE BARS
*Burlington Steel Co., Ltd., Hamilton, Ont.
*MacKinnon Steel Co., Limited, Sherbrooke, Que.
*The Steel Company of Canada, Ltd., Hamilton, Ont.

ARSENIC
*Deloro Smelting & Refining Co., Limited, Deloro, Ont.

ARTIFICIAL LIMBS
Chesley Artificial Limb Co., Ltd., Hantsport, N.S.

ASBESTOS
Atlas Asbestos Company, Limited Montreal, Que.
*Eureka Mineral Wool & Asbestos Co., Toronto, Ont.

ASBESTOS SHEATHING
*Eureka Mineral Wool & Asbestos Co., Toronto, Ont.

ASBESTOS SHEET AND PISTON PACKINGS
Atlas Asbestos Company, Limited, Montreal, Que.
*Eureka Mineral Wool & Asbestos Co., Toronto, Ont.

ASBESTOS STEAM PIPE AND BOILER COVERINGS
Atlas Asbestos Company, Limited, Montreal, Que.
*Eureka Mineral Wool & Asbestos Co., Toronto, Ont.

ASBESTOS TEXTILES
Atlas Asbestos Company, Limited, Montreal, Que.
*Eureka Mineral Wool & Asbestos Co., Toronto, Ont.

AUTOMOBILE PARTS
*Dominion Forge & Stamping Co., Walkerville, Ont.

AUTOMOBILE TIRES
Ames-Holden-McCready, Limited, Montreal, Que.

AWNING CORD (cotton)
Hamilton Cotton Co., Hamilton, Ont.

AXLES
Guelph Spring & Axle Co., Ltd., Guelph, Ont.

AXLES, carriage and automobile
Guelph Spring & Axle Co., Ltd., Guelph, Ont.

BABBITT METAL
Alonzo W. Spooner, Ltd., Port Hope, Ont.
Beveridge Supply Co., Limited, Montreal, Que.
*Hoyt Metal Co., Toronto, Ont.
Magnolia Metal Co. of Canada, Ltd., Montreal, Que.
*The Canada Metal Co., Toronto, Ont.
*Tallman Brass & Metal, Ltd., Hamilton, Ont.

BAGS, Cotton
The Canadian Bag Co., Limited, Montreal, Que.

BAGS, jute
The Canadian Bag Co., Limited, Montreal, Que.

BAGS, travelling
J. Eveleigh & Co., Ltd., Montreal.
Lamontague, Ltd., Montreal, Que.
*The M. Langmuir Mfg. Co., of Toronto, Ltd., Toronto, Ont.

BAND RESAWS
*Canada Machinery Corporation, Limited, Galt, Ont.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.

BAND SAWS
*E. C. Atkins & Co., Inc., Hamilton, Ont.

BANK FITTINGS
The Canadian Office & School Furniture Co., Ltd., Preston, Ont.

BANK AND OFFICE RAILINGS AND CAGES
*Canada Wire and Iron Goods Co., Hamilton, Ont.
*Dennis Wire & Iron Works Co., London, Ont.
*The Geo. B. Meadows, Toronto, Wire, Iron & Brass Works Co., Ltd., Toronto, Ont.

BARRELS, steel, and containers
*Smart-Turner Machine Co., Ltd., Hamilton, Ont.

BARS, iron
London Rolling Mill Co., Ltd., London, Ont.

BARS, steel
London Rolling Mill Co., Ltd., London, Ont.

BASEBALL GOODS
A. J. Reach Co., Brantford, Ont.

BATHS, enamelled
Amherst Foundry Co., Ltd., Amherst, N.S.

BATTERIES, dry
*The Canadian National Carbon Co., Ltd., Toronto, Ont.

BATTERIES, Flashlight
*The Canadian National Carbon Co., Ltd., Toronto, Ont.

BATTERIES, Storage
*The Canadian National Carbon Co., Ltd., Toronto, Ont.

BEARINGS, pillow block and upright
*Canadian Fairbanks-Morse Company, Ltd., Montreal, Que.

BELT HOOKS
*Torrington Company, Limited, Upper Bedford, Que.

BELTING CHAINS
*Canadian Link-Belt Company, Ltd., Toronto, Ont.

BELTING, elevator
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.

BELTING, leather
The Beardmore Belting Co., Ltd., Toronto, Ont.
*J. L. Goodhue & Co., Danville, Que.
*McArthur Beltings, Limited, Brockville, Ont.
*The D. K. McLaren Belting Co., Ltd., Montreal, Que.
*The J. C. McLaren Belting Co., Ltd., Montreal, Que.

BELTING, rubber
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
*Gutta Percha and Rubber Ltd., Toronto, Ont.

BELTING, stitched cotton duck
*Dominion Belting Co., Ltd., Hamilton, Ont.

BENT GOODS
The Crown Lumber Co., Woodstock, Ont.

BISCUITS
The Montreal Biscuit Co., Montreal, Que.

BLACK SHEETS
*A. C. Leslie & Co., Montreal, Que.

BLANKETS
Slingsby Mfg. Co., Ltd., Brantford, Ont.
J. Walshaw & Son, Ltd., Bolton, Ont,

BLANKETS, horse
Slingsby Mfg. Co., Ltd., Brantford, Ont.
J. Walshaw & Son, Ltd., Bolton, Ont.

BLASTING ACCESSORIES
Canadian Explosives, Ltd., Montreal, Que.

BLEACHING POWDER
*Canadian Salt Co., Ltd., Windsor, Ont.

BLOWERS
*The Canadian Blower & Forge Co., Ltd., Kitchener, Ont.

BOATS OF ALL KINDS
Peterboro Canoe Co., Ltd., Peterboro, Ont.

BOBBINS
Canada Spool & Bobbin Co., Ltd., Walkerton, Ont.

BOILER COMPOUND
Beveridge Supply Co., Limited, Montreal, Que.

BOILER COMPOUND AND OILS
Electric Boiler Compound Co., Ltd., Guelph, Ont.

BOILER GRAPHITE
Black Donald Graphite Company, Limited, Calabogie, Ont.

BOILER LININGS AND COVERINGS
Beveridge Supply Co., Ltd., Montreal, Que.

BOILERS
*Canadian Mead Morrison Co., Ltd., Montreal, Que.
*Goldie & McCulloch Co., Limited, Galt, Ont.
*E. Leonard & Sons, Ltd., London, Ont.
J. & R. Weir, Montreal, Que.
Taylor-Forbes Co., Ltd., Guelph
*The Waterous Engine Works Co., Ltd., Brantford, Ont.

BOILERS, hot water or steam
Warden King, Ltd., Montreal.

BOILERS, steam
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.

BOILERS, steam and brass work
*The Waterous Engine Works Co., Ltd,, Brantford, Ont.

BOLTS AND NUTS
*The Canadian Tube & Iron Co., Ltd., Montreal, Que.
*The National Acme Mfg. Co., Montreal, Que.
*The Steel Company of Canada, Ltd., Hamilton, Ont.

BOOKBINDERS
*The Brown Bros., Ltd., Toronto.

BOOKCASES
*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.

BOOKCASES, sectional (Gunn)
The George McLagan Furniture Co., Ltd., Stratford, Ont.

BOOKS, blank
*The Brown Bros., Ltd., Toronto.

BOOTS AND SHOES
Ames—Holden—McCready, Limited, Montreal, Que.
J. Leckie Co., Ltd.
The John Ritchie Co., Ltd., Quebec, Que.

BOXES, cellular and fibre board
*Hinde & Dauch Paper Co. of Canada, Limited. Toronto.
*Thompson & Norris Co., of Canada, Ltd., Toronto and Montreal.

BOXES, rattle and soap
The Arlington Co. of Canada, Ltd., Toronto, Ont,

BOXES, steel shop
*Steel Trough and Machine Co., Ltd., Tweed, Ont.

BOXES AND SHOOKS, wooden
The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.

BOXES, wooden
Barchard & Co., Ltd., Toronto.

BRAKE SHOES
*Canadian Hart Wheels, Limited, Hamilton, Ont.

BRANDS, burning
Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS AND BRONZE WIRE
*Standard Underground Cable Co of Canada, Ltd., Hamilton, Ont.

BRASS ENGRAVERS
Pritchard, Andrews Co, of Ottawa, Ltd., Ottawa, Ont.

BRASS FOUNDERS AND FINISHERS
*The Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.
Sully Brass Foundry, Limited, Toronto
*Tallman Brass & Metal, Ltd., Hamilton, Ont.

*For Display Advertisement see Index, Page 241

The James Morrison Brass Mfg. Co., Ltd., Toronto, Ont.
*The Kerr Engine Co., Limited, Walkerville, Ont.

BRASS RODS, SHEETS AND PLATES
*Brown's Copper and Brass Rolling Mills, Ltd., New Toronto.

BRASS TUBING, seamless
Canadian Seamless Wire Co., Ltd., Toronto, Ont.

BRASS WIRE
Canadian Seamless Wire Co., Ltd., Toronto.

BRASS WORK, church
Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS WORK, special
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.

BRICK
National Brick Co. of Laprairie, Laprairie, Que.

BRICK, enamel
National Brick Co. of Laprairie, Laprairie, Que.

BRICK, pressed
National Brick Co. of Laprairie, Laprairie, Que.

BRICK, rubbing
*Canadian Hart Wheels, Limited, Hamilton, Ont.

BRICK, sewer.
National Brick Co. of Laprairie, Laprairie, Que.

BRIDGES, Railway and Highway
*Canadian Des Moines Steel Co., Limited, Chatham.
*Hamilton Bridge Works Co., Ltd., Walkerville, Ont.
*The Canadian Bridge Co., Ltd., Hamilton, Ont.
*McGregor & McIntyre, Ltd., Toronto, Ont.
*Dominion Bridge Co., Montreal.
*Mackinnon Steel Co., Ltd., Sherbrooke, Que.

BROOMS
Simms, T. S., & Co., Limited, St. John, N.B.
Stevens-Hepner Co., Limited, Port Elgin, Ont.

BRONZE SHEETS, RODS, PLATES
*Brown's Copper and Brass Rolling Mills, Ltd., New Toronto. Que.

BRUSHES
Simms, T. S., & Co., Limited, St John, N.B.
Stevens-Hepner Co., Ltd., Port Elgin, Ont.

BRUSHES, MOTOR AND GENERATOR
Dominion Carbon Brush Co., Toronto.

BRUSHES, carbon
*Canadian National Carbon Co., Ltd., Toronto.

BUCKET TANKS
*MacKinnon Steel Co., Ltd., Sherbrooke, Que.
*The Bennett & Wright Co., Ltd., Toronto, Ont.

BUILDING FELT AND PAPER
Beveridge Supply Co., Limited, Montreal, Que.
*Eureka Mineral Wool & Asbestos Co., Toronto, Ont.
*The Barrett Co., Ltd., Toronto and Montreal.

CHEMICALS
Canadian Laboratory Supplies, Ltd., Toronto, Ont.
*The Grasselli Chemical Co., Ltd., Toronto, Ont.
*The Nichols Chemical Co., Ltd. Montreal, Que.

BUNGS, wooden for barrels
Wm. H. White, Ville St. Pierre, Montreal, Que.

BUCKLES, shoe and coat
Parmenter & Bulloch Co., Limited, Gananoque, Ont.

BURLAPS
The Canadian Bag Co., Limited, Montreal, Que.

BURLAPS, decorative
Dominion Oil Cloth and Linoleum Co., Limited, Montreal, Que.

CABLES, electric light, power, telephone and telegraph
*Northern Electric Company, Limited, Montreal, Que.
*Standard Underground Cable Co. of Canada, Ltd,, Hamilton, Ont.

CABLES, wire
*The Dominion Wire Rope Co., Ltd., Montreal, Que.
*The B. Greening Wire Co., Ltd., Hamilton, Ont.

CALENDARS, ADVERTISING NOVELTIES, etc.
Lawson & Jones, Ltd., London.

CAMERAS
Canadian Kodak Co., Ltd., Toronto, Ont.

CAMPERS' OUTFITTERS
Slingsby Mfg. Co., Ltd., Brantford, Ont.

CANADA SILVER
*Brown's Copper and Brass Rolling Mills, Ltd., New Toronto.

CANOES
Peterboro Canoe Co., Ltd., Peterboro, Ont.
The "Canadian" Canoe Co., Ltd., 216 Rink St., Peterborough, Ont.

CANS, baking powder, etc.
American Can Co., Montreal (Que.) and Hamilton (Ont.).
A. R. Whittall Can. Co., Ltd., Montreal, Que.
*MacDonald Mfg. Co., Ltd., Toronto, Ont.

CANS, fruit
American Can Co., Montreal (Que.) and Hamilton (Ont.).
A. R. Whittall Can Co., Ltd., Montreal, Que.
*MacDonald Mfg. Co., Ltd., Toronto, Ont.

CANS, iron, lead and putty
A. R. Whittall Can. Co., Ltd., Montreal, Que.

CANS, tin
A. R. Whittall Can. Co, Ltd., Montreal, Que.
American Can Co.. Montreal (Que.) and Hamilton (Ont.).
*MacDonald Mfg. Co., Ltd., Toronto, Ont.

CAPS, cloth
John W. Peck & Co., Ltd., Montreal, Que.

CARBIDE
*Canada Carbide Co., Ltd., Montreal. Que.

CARBONS-PROJECTOR
*Canadian National Carbon Co., Toronto, Ont.

CARBONIC ACID GAS
*Canadian Carbonate Co.. Montreal.
*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.

BRASS GOODS
*The Booth-Coulter Copper & Brass Co.. Ltd.. Toronto. Ont.

CARPETS AND RUGS
Toronto Carpet Mfg. Co., Limited, Toronto.

CARRIERS, box and barrel
*Canadian Mathews Gravity Carrier.

CARRIERS
*Richards-Wilcox Canadian Co., Ltd., London, Ont.

CARRIERS, brick
*Canadian Mathews Gravity Carrier Co., Limited, Toronto.
*Richards-Wilcox Canadian Co., Ltd., London, Ont.

CARS
*National Steel Car Co., Ltd., Hamilton, Ont.

CARS, industrial
*MacKinnon Steel Co., Ltd,, Sherbrooke, Que.

CARTONS, lithographed
Consolidated Lithographing and Mfg. Co., Ltd., Montreal, Que.
Harris Lithographing Co., Ltd., Toronto, Ont.

CASTINGS, Alloy
*The Electric Steel & Metals Co., Ltd., Welland, Ont.

CASTINGS, aluminum, brass and bronze
*Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.
Fittings Limited, Oshawa, Ont.
Sully Brass Foundry, Limited, Toronto.

CASTINGS, grey iron
*Canadian Rumely Co., Ltd., Toronto, Ont.
Fittings Limited, Oshawa, Ont.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Wm. Kennedy & Sons, Ltd., Owen Sound, Ont.

CASTINGS, malleable iron
Fittings Limited, Oshawa, Ont.
*Galt Malleable Iron Co., Ltd., Galt, Ont.
Mapleleaf Manufacturing Comp-Smith's Falls, Ont.

CASTINGS, steel
Beauchemin & Fils, Ltd., Sorel. Que.
*Canadian Steel Founderies, Ltd., Montreal, Que.
*Dominion Foundries and Steel Co., Ltd., Hamilton, Ont.
*Electric Steel & Metals Co., Ltd., Welland, Ont.
*Wm. Kennedy & Sons, Ltd., Owen Sound. Ont.

CATALOGUE MAKERS
Grip, Ltd., Toronto, Ont.

CATALOGUE COVERS, by new lithographing process
Harris Lithographing Co., Ltd., Toronto, Ont.

CAUSTIC SODA
*Canadian Salt Co., Ltd., Windsor.

CEMENT WATERPROOFING
*Trussed Concrete Steel Company of Canada, Ltd., Walkerville, Ont.

CEMENTS, High Temp.; plastic, liquid
Beveridge Supply Co., Limited, Montreal, Que.

CENTRIFUGAL PUMPS
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

CHAIN, Detachable & Riveted
Fittings Limited, Oshawa, Ont.

CHAINS, for elevators, conveyors and drives
*Canadian Link-Belt Company, Ltd., Toronto, Ont.
Dodge Manufacturing Co. of Canada, Ltd., Toronto.

CHAIRS
*Office Specialty Mfg. Co., Ltd. Newmarket, Ont.

CHAIRS; Folding and Assembly Seating
Stratford Mfg. Co., Ltd., Stratford, Ont.

CHAIRS, rattan and upholstered
Imperial Rattan Co., Ltd., Stratford, Ont.

CHEMISTS, industrial
*Milton Hersey Co., Montreal.

CIRCULAR CUTTERS, solid steel
*Galt Knife Co., Ltd.
The Peter Hay Knife Co., Ltd., Galt, Ont.

CIRCULAR SAWS
*E. C. Atkins & Co., Inc., Hamilton, Ont.

CLAM SHELL BUCKETS
*Canadian Mead Morrison Co., Ltd., Montreal, Que.

CLOCKS, time
*International Business Machines Co., Ltd., Toronto, Ont.

CLOCKS, watchmen's
*The Bennett & Wright Co., Ltd., Toronto, Ont.

CLOSET SEATS
*Goderich Organ Co., Goderich,Ont.

CLOTHING
John W. Peck & Co., Ltd., Montreal, Que.

CLOTHING, leather and sheepskin lined coats
*A R. Clarke & Co., Ltd., Toronto.

CLOTHING, Mackinaw
The Carss Mackinaw Clothing Co., Ltd., Orillia, Ont.

CLOTHES LINES, cotton
Hamilton Cotton Co., Hamilton, Ont.

COAL
*Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.
Standard Fuel Co., Toronto, Ont.

COBALT OXIDE
*Deloro Smelting & Refining Co., Ltd., Deloro, Ont.
The Coniagas Reduction Co., Ltd., St. Catharines, Ont.

COBALT METAL
*Deloro Smelting & Refining Co., Ltd., Deloro, Ont.

COFFEE
S. H. Ewing & Sons, Montreal.

COLD DRAWN SHAPES, flats, squares and hexagons
*The Canadian Drawn Steel Co.. Ltd., Hamilton, Ont.
*Union Drawn Steel Co.. Ltd.. Hamilton, Ont.

COLD STORAGE DOORS
*John Hillock & Co., Ltd., Toronto.

COLLAR BUTTONS
The Arlington Co. of Canada, Ltd., Toronto, Ont.

Collars

"Kantkrack" Composition
Parsons & Parsons Canadian Co., Hamilton, Ont.

COLORS
*A. Ramsay & Son Co., Montreal.

COMBS, fine dressing and name
The Arlington Co. of Canada, Ltd., Toronto

COMMERCIAL STATIONERY
*Brown Bros., Ltd., Toronto, Ont.

CONCRETE COATINGS, PAINTS, Etc.
*The Imperial Varnish & Color Co., Ltd., Toronto, Ont.

CONCRETE HARDENER AND WATERPROOFER
Beveridge Supply Co., Limited, Montreal, Que.
Sturgeons Limited, Toronto.

CONDENSERS, Barometic
*Canadian Ingersoll-Rand Co., Sherbrooke, Que.

CONDENSERS, jet and surface
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

CONDENSERS, rotary jet
*The Goldie & McCulloch Co., Ltd Galt. Ont.

CONDUIT FOR INTERIOR WIRING
*Conduits Co., Ltd., Toronto, Ont.
*National Conduit Co., Limited, Toronto.

*For Display Advertisement see Index, Page 241

CONFECTIONERY
Ganong Bros., Ltd., St. Stephens, N.B.
Moirs, Ltd., Halifax, N.S.
The Montreal Biscuit Co., Montreal, Que.

CONTAINER BOARD—strong container
*Bathurst Lumber Co., Ltd., Bathurst, N.B.

CONTRACTOR'S PLANT
*Canadian Mead Morrison Co., Ltd., Montreal, Que.

CONVEYORS
*Canadian Link-Belt Company, Ltd. Toronto, Ont.
*Canadian Mathews Gravity Carrier Co., Toronto.
Dodge Manufacturing Co. of Canada, Ltd., Toronto.

COPPER
*Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.
*Consolidated Mining & Smelting Co. of Canada, Ltd., Montreal.

COPPER, SHEETS, PLATES, BARS, RODS
*Brown's Copper and Brass Rolling Mills, Ltd., New Toronto, Ont.
*Booth-Coulter Copper & Brass Co Ltd., Toronto, Ont.

COPPERSMITHS
*Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.

COPPER TUBING, seamless
Canadian Seamless Wire Co., Ltd., Toronto, Ont.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.

CONDUIT-FLEXIBLE-"BRAIDUCT"
The Dalyte Electric Limited, Guelph, Ont.

COPPER WIRE
Canadian Seamless Wire Co., Ltd., Toronto, Ont.
*Standard Underground Cable Co. of Canada, Ltd., Hamilton, Ont.

COPYRIGHTS
Harold C. Shipman & Co., Ottawa, Ont.

CORKS
S. H. Ewing & Sons, Montreal, Que.

CORK CARPET
Dominion Oil Cloth and Linoleum Co., Ltd., Montreal, Que.

CORRUGATED PAPER BOXES
Corrugated Paper Box Co., Ltd., Toronto, Ont.
*Hinde & Dauch Paper Co. of Canada, Limited, Toronto.
Standard Paper Box Company, Ltd., Montreal, Que.
*Thompson & Norris Co., of Canada, Ltd., Toronto and Montreal.

CORSETS
Dominion Corset Co., Quebec, Que.

COTTONS
*Montreal Cottons, Ltd., Valleyfield, P.Q.

COTTONADES
Hamilton Cotton Co., Hamilton, Ont.

COUPLERS
*Canadian Steel Foundries, Ltd., Welland, Ont.

CRANES
*Northern Crane Works, Walkerville, Ont.
*The Herbert Morris Crane and Hoist Co., Ltd., Niagara Falls, Ont.

CREAM CHEESE, Ingersoll
The Ingersoll Packing Co., Ltd., Ingersoll, Ont.

CREAM SEPARATORS AND MILK CLARIFIERS
De Laval Dairy Supply Co., Peterboro, Ont.

CREAMERY AND CHEESE FACTORY MACHINERY AND SUPPLIES
De Laval Dairy Supply Co., Ltd., Peterboro, Ont.

CREOSOTED MATERIALS
*The Barrett Co., Ltd., Toronto and Montreal.

CRUSHERS, Rock and Ore
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.

CUPOLAS
*Northern Crane Works, Ltd., Walkerville, Ont.

CUPS, presentation
Standard Silver Co., Toronto, Ont.

CURTAINS, chenille
Hamilton Cotton Co., Hamilton, Ont.

CUTLERY
Standard Silver Co., Toronto, Ont.

CUTTERS, machine
*Pratt & Whitney Co., Dundas, Ont.

DECALCOMANIA TRANSFERS
Canada Decalcomania Co., Toronto, Ont.

DENIMS
Hamilton Cotton Co., Hamilton, Ont.

DERAILS
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

DESIGNERS AND PRINTERS OF BOOKLETS, Etc.
Grip, Ltd., Toronto, Ont.

DESIGNERS OF LABOR SAVING DEVICES
Harold C. Shipman & Co., Ottawa, Ont.

DESKS
*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.
The Macey Office Equipment Co., Toronto.

DIE CASTINGS
*Tallman Brass & Metal, Limited Hamilton, Ont.

DIES
*Butterfield & Co., Rock Island, P.Q.
*Pratt & Whitney Co., Dundas, Ont.

DIES, for metal stampings.
Larsen & Shaw, Ltd., Walkerton.

DINING ROOM SUITES
The George McLagan Furniture Co., Ltd., Stratford, Ont.

DISINFECTING APPARATUS
Spramotor Co., London, Ont.

DOOR HANGERS
*Richards Wilcox Canadian Co., Ltd., London, Ont.

DREDGES
*Canadian Mead Morrison Co., Ltd., Montreal, Que.

DRILL PRESSES
*Canada Machinery Corporation, Ltd., Galt, Ont.

DRILL SHARPENERS
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.

DRILLS
*John Morrow Screw & Nut Co., Ltd., Ingersoll, Ont.
*Pratt & Whitney Co., Dundas, Ont.

DRIFT BOLTS OR SPIKES
London Rolling Mill Co., Ltd., London, Ont.

DROP HAMMERS
*Canada Machinery Corporation, Ltd., Galt, Ont.

DRUMS, steel, and containers
*Smart-Turner Machine Co., Ltd., Hamilton, Ont.

DRY COLORS
*The Imperial Varnish & Color Co., Ltd., Toronto.

DUMB WAITERS
Turnbull Elevator Mfg. Co., Toronto, Ont.

DURABLE WIRE ROPE
*The Dominion Wire Rope Co., Ltd., Montreal, Que.

DYNAMITE
Canadian Explosives, Ltd., Montreal, Que.

DYNAMOS
*Jones & Moore Electric Co., Ltd., Toronto, Ont.
*The Canadian Crocker-Wheeler Co., Ltd., St. Catharines, Ont.

DYNAMOS, plating
*Jones & Moore Electric Co., Ltd., Toronto, Ont.

EIDERDOWN
Galt Knitting Co., Ltd., Galt, Ont.

ELECTRICAL AND GAS FIXTURES
The Garth Co., Montreal, Que.
The James Morrison Brass Mfg. Co., Ltd., Toronto, Ont.
*Tallman Brass & Metal, Ltd., Hamilton, Ont.

ELECTRIC APPLIANCES
*Canadian Crocker-Wheeler Co., Ltd., St. Catharines, Ont.
*Canadian Westinghouse Co., Ltd., Hamilton, Ont.

ELECTRIC LAMPS
The Dalyte Electric Limited, Guelph, Ont.

ELECTRICAL COMPOUNDS
Standard Paint Co. of Canada, Ltd., Montreal, Que.

ELECTRIC PLATE WARE
Roden Bros., Ltd., Toronto, Ont.

ELECTRODES, carbon
*Canadian National Carbon Co., Ltd., Toronto, Ont.

ELECTROTYPING
Central Press Agency, Ltd., Toronto.

ELECTRICAL SUPPLIES
*Canadian Westinghouse Co., Ltd., Hamilton, Ont.
*Jones & Moore Electric Co., Ltd.,
*Northern Electric Co., Ltd., Montreal, Que.

ELECTRO-SILVER PLATED WARE
Standard Silver Co., Toronto, Ont.

ELEVATING MACHINERY
*Canadian Link-Belt Company, Ltd., Toronto, Ont.
*Canadian Mathews Gravity Carrier Co., Toronto, Ont.
Dodge Manufacturing Co. of Canada, Ltd., Toronto.

ELEVATORS
*MacKinnon Steel Co., Ltd., Sherbrooke, Que.
Turnbull Elevator Mfg. Co., Toronto, Ont.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.
*Northern Crane Works, Ltd., Walkerville, Ont.

ELEVATORS FOR ALL PURPOSES
*The Waterous Engine Works Co., Ltd., Brantford, Ont.

ELEVATOR GATES AND DOORS
Turnbull Elevator Mfg. Co., Ltd., Toronto, Ont.
*The A. B. Ormsby Co., Ltd., Toronto, Ont.

ELEVATOR GUARDS
*The Geo. B. Meadows, Toronto.
Iron & Brass Goods Works Co., Ltd., Toronto, Ont.
*Canada Wire and Iron Goods Co., Hamilton, Ont.

EMERY GRINDERS
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

EMERY WHEELS
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

ENAMELS
Berry Brothers, Inc., Walkerville, Ont.
Dominion Paint Works, Limited, Walkerville, Ont.
*The Imperial Varnish & Color Co., Ltd., Toronto, Ont.

ENAMEL AND TIN WARE
*McClary Mfg. Co., London, Ont.

ENGINES
*E. Leonard & Sons, Limited, London, Ont.
*Goldie & McCulloch Co., Ltd., Galt, Ont.
J. & R. Weir, Montreal, Que.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.

ENGINES, gas and gasoline
*Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
*Hamilton Motor Works, Ltd., Hamilton, Ont.
*Massey-Harris Co., Ltd., Toronto.

ENGINES, gasoline, tractor, plowing and threshing
Sawyer-Massey Co., Ltd., Hamilton, Ont.

ENGINES, hoisting
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.
*Canadian Mead Morrison Co., Ltd., Montreal, Que.
*The Waterous Engine Works Co. Ltd., Brantford, Ont.

ENGINES, marine, gasoline and kerosene
Bruce, Stewart & Co., Ltd., Charlottetown, P.E.I.

ENGINES, steam plowing and threshing
Sawyer-Massey Co., Ltd., Hamilton, Ont.

ENGRAVERS, photo
Grip, Ltd., Toronto, Ont.

ENGRAVERS, half-tone
Grip, Ltd., Toronto.

ENGRAVERS AND PRINTERS steel plate
American Bank Note Co., Ottawa, Ont.

ENGRAVERS AND PRINTERS bank note
American Bank Note Co., Ottawa, Ont,

ENGRAVING
*J. L. Jones Engraving Co., Toronto, Ont.

ENGRAVING, copper and steel plate
Pritchard-Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

ENSILAGE AND STRAW CUTTERS
J. Fleury's Sons, Aurora, Ont.
*Ontario Wind Engine & Pump Co., Ltd., Toronto, Ont.

ENVELOPES
*Barber-Ellis Co., Ltd., Toronto.
Canada Envelope Co., Montreal, Que.

EXPANSION BOLTS
Beveridge Supply Co., Limited, Montreal, Que.

EXPERTS IN PATENT CAUSES
*Ridout & Maybee, Toronto, Ont.

EXPLOSIVES, high
Canadian Explosives, Ltd., Montreal, Que.

FACE PLATE JAWS
*Ker & Goodwin, Brantford, Ont.

FACTORY SUPPLIES, cheese and creamery
De Laval Dairy Supply Co., Ltd., Montreal, Que.

FANS
*The Canadian Blower & Forge Co., Ltd., Kitchener, Ont.

FENCING, wire
*C. H. Johnson & Sons, Ltd., Montreal, Que.

FELTS, pulp and paper makers
Ayers, Ltd., Lachute Mills, P.Q.

FENCES AND GATES
*Dennis Wire & Iron Works Co., London, Ont.
*Canada Wire & Iron Goods Co., Hamilton, Ont.
*Frost Steel & Wire Company, Limited, Hamilton, Ontario.

FIBRE PAILS
*The E. B. Eddy Co., Ltd., Hull, Que.

FIBRE (vulcanized), sheets, rods, tubes, etc.
*The Diamond State Fibre Co. of Canada, Ltd., Toronto.

FIBREBRICK, Plastic, jointless
Beveridge Supply Co., Limited, Montreal, Que.

FILES.
Henry Disston & Sons, Ltd., Toronto, Ont.
*John Morrow Screw & Nut Co., Ltd., Ingersoll, Ont.
*The Nicholson File Co., Port Hope.
The Ingersoll File Company, Ltd. Ingersoll, Ont.

FILING CABINETS
*Office Specialty Co., Newmarket, Ont.

FILING DEVICES
The Macey Office Equipment Co., Toronto.

FILING EQUIPMENT, wood & steel
*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.

FILING SYSTEMS
*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.

FIRE ALARMS
*Northern Electric Co., Ltd., Montreal, Que.

* For Display Advertisement see Index, Page 241

FIRE BRICK
Dominion Fire Brick & Clay Products, Ltd., Moose Jaw, Sask.
FIRE BRICK AND CLAY
Dominion Fire Brick & Clay Products, Ltd., Moose Jaw, Sask.
FIRE BRICK, PLASTIC
Beveridge Supply Co., Limited, Montreal, Que.
FIRE DOOR HARDWARE
*Richard Wilcox Canadian Co., Ltd., London, Ont.
FIRE DOORS
*A. B. Ormsby Co., Ltd., Toronto.
*The Pedlar People, Ltd., Oshawa, Ont.
FIRE ENGINES
American LaFrance Fire Engine Company of Canada, Limited, Toronto.
*Waterous Engine Works Co., Ltd., Brantford, Ont.
FIRE ESCAPES
American LaFrance Fire Engine Company of Canada, Limited, Toronto.
Canadian Des Moines Steel Co., Chatham, Ont.
*Canada Wire & Iron Goods Co., Hamilton, Ont.
*Dennis Wire & Iron Works Co., London, Ont.
*McGregor & McIntyre, Ltd., Toronto, Ont.
FIRE EXTINGUISHERS
*A. B. Ormsby Co., Ltd., Toronto.
American LaFrance Fire Engine Company of Canada, Limited, Toronto.
*Booth-Coulter Copper & Brass Co. Ltd., Montreal, Que.
*The Bennett & Wright Co., Ltd., Toronto, Ont.
FIRE FIGHTING APPARATUS
American LaFrance Fire Engine Company of Canada, Limited, Toronto.
*Waterous Engine Works Co., Ltd Brantford, Ont.
FIRE HOSE
*Canadian Consolidated Rubber Co of Canada, Ltd., Montreal, Que
*Gutta Percha & Rubber, Ltd., Toronto, Ont.
FIRE PREVENTION MATERIAL
*Chicago Bridge & Iron Works Bridgeburg, Ont.
*Eureka Mineral Wool & Asbestos Co., Toronto.
*The Bennett & Wright Co., Ltd Toronto, Ont
FIRE-PROOF WINDOWS AND DOORS
*Canadian Metal Window & Steel Products, Limited, Toronto.
*A. B. Ormsby Co., Ltd., Toronto.
*Pedlar People, Ltd., Oshawa, Ont
*Trussed Concrete Steel Company of Canada, Ltd., Walkerville, Ont.
FIRE PROTECTION SYSTEMS
*Canadian Des Moines Steel Co., Limited, Chatham.
FIRE SPRINKLER SYSTEMS
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
*The Bennett & Wright Co., Ltd. Toronto, Ont.
*Purdy Mansell Co., Toronto, Ont
FIRE AND WATER DEPARTMENT
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
The Garth Co., Montreal, Que.
FISH, Atlantic Sea-Foods
Maritime Fish Corporation, Ltd., Montreal, Que.
FITTINGS, Pipe
Fittings Limited, Oshawa, Ont.
FITTINGS FOR SOIL PIPE
Anthes Foundry, Ltd., Toronto.
FITTINGS, steam
Warden King Ltd., Montreal, Que.
FLOORING, hardwood
Seaman Kent Co., Ltd., Meaford, Ont.
FOLDING PAPER BOXES
Standard Paper Box Company, Ltd, Montreal, Que.
FORGES
*Canadian Blower & Forge Co., Ltd., Kitchener, Ont.
FORGINGS
*Canada Foundries & Forgings Co., Welland, Ont.
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
FORGINGS, drop
*Dominion Forge & Stamping Co., Walkerville, Ont.
FOUNDRY EQUIPMENT
*Northern Crane Works, Ltd., Walkerville, Ont.
FOUNTAIN FRUITS AND JUICES
J. J. McLaughlin, Ltd., Toronto.
FROGS AND CROSSINGS, manganese
Canadian Ramapo Iron Works, Ltd., Niagara Falls, Ont.
FUEL
Standard Fuel Co., Toronto, Ont.
FUR GARMENTS, men's and women's
Holt, Renfrew, Ltd., Quebec.
FUR GOODS
John W. Peck & Co., Ltd., Montreal, Que.
FURNACES
*McClary Mfg. Co., London, Ont.
FURNITURE; Camp and Verandah and Novelties
The Stratford Mfg. Co., Limited, Stratford, Ont.
FURNITURE, hall
The George McLagan Furniture Co., Ltd., Stratford, Ont.
FURNITURE, office
The Canadian Office & School Furniture Co., Ltd., Preston, Ont.
FURNITURE, reed and rattan
Imperial Rattan Co., Ltd., Stratford, Ont.
FUSES
*Economy Fuse & Mfg. Co., Montreal, Que.
GALVANIZED IRON
*A. C. Leslie & Co., Montreal.
GALVANIZED SHEETS
*Dominion Sheet Metal Co., Hamilton, Ont.
*The A. B. Ormsby Co., Ltd., Toronto, Ont.
GALVANIZERS
Acme Stamping & Tool Works Ltd., Hamilton, Ont.
Fittings Limited, Oshawa, Ont.
*Ontario Wind Engine & Pump Co., Ltd., Toronto, Ont
*The Pedlar People, Ltd., Oshawa.
GALVANIZED CUSTOM WORK
The Goold, Shapley & Muir Co., Ltd., Brantford, Ont.
GASOLINE ENGINES
*Ontario Wind & Pump Co., Ltd., Toronto, Ont.
De Laval Dairy Supply Co., Ltd., Peterboro, Ont
*The Goold Shapley & Muir Co., Limited, Brantford, Ont.
GASOLINE FIRE ENGINES
American LaFrance Fire Engine Company of Canada, Limited, Toronto.
*Waterous Engine Works Co., Ltd., Brantford, Ont.
GASOLINE STORAGE SYSTEMS, special underground
*S. F. Bowser & Co., Toronto.
*Steel Trough & Machine Co., Ltd., Tweed, Ont.
GASOLINE
*The Imperial Oil Co., Ltd., Toronto, Ont.
GEARS, cut
*Hamilton Gear and Machine, Toronto.
GEARS (noiseless, waterproof)
*The Diamond State Fibre Co. of Canada, Ltd., Toronto.
GELATINE
Canada Gelatine Co., Ltd., Brantford, Ont.
GENERATORS
*Canadian Crocker-Wheeler Co., Ltd., St. Catharines, Ont.
*Canadian Westinghouse Co., Ltd., Hamilton, Ont.
GLASSWARE
Dominion Glass Co., Ltd., Montreal, Que.
GLASSWARE, cut
Roden Bros., Ltd., Toronto.
GLASS FOR BUILDINGS
Toronto Plate Glass Importing Co., Ltd., Toronto, Ont.
GLASS BENDERS
Toronto Plate Glass Importing Co., Ltd., Toronto, Ont.
GLASS, mirror
Toronto Plate Glass Importing Co., Ltd., Toronto, Ont.
GLOVES AND MITTS
*A. R. Clarke & Co., Ltd., Toronto.
Craig, Cowan Co., Ltd., Toronto.
GLUE
Canada Glue Co., Ltd., Brantford, Ont.
GOLD-FILLED WIRE AND PLATE
Canadian Seamless Wire Co., Toronto, Ont.
GOLD AND SILVER REFINERS
Canadian Seamless Wire Co., Toronto, Ont.
GRAIN CRUSHERS, rapid, easy
J. Fleury's Sons, Aurora, Ont.
GRAPE JUICE
J. J. McLaughlin, Ltd., Toronto.
The Welch Co., Ltd., St. Catharines, Ont.
GRAPHITE, lubricating
Black Donald Graphite Company, Limited, Calabogie, Ont.
GRATES
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
GRAVITY CARRIERS
*Canadian Mathews Gravity Carrier Co., Toronto, Ont.
GRILLES, metal
*Canada Wire & Iron Goods Co., Hamilton, Ont.
*Dennis Wire & Iron Works Co., London, Ont.
GRINDING MACHINERY
*Ford Smith Machine Co., Ltd., Hamilton, Ont.
*Norton Company of Canada, Ltd., Hamilton, Ont.
GRINDING AND POLISHING MACHINERY
*Canadian Hart Wheels, Ltd., Hamilton, Ont.
GRINDING WHEELS
*Canadian Hart Wheels, Ltd., Hamilton, Ont.
*Norton Company of Canada, Ltd., Hamilton, Ont.
*The Dominion Abrasive Wheel Co., Ltd., New Toronto, Ont.
GRINDSTONES
*Richards-Wilcox Canadian Co., Ltd., London, Ont.
GUNN SECTIONAL BOOKCASES
The Geo. McLagan Furniture Co., Ltd., Stratford, Ont.
GUY ANCHORS
B. J. Coghlin Co., Ltd., Montreal.
GYPSUM PRODUCTS
De Laval Dairy Supply Co., Ltd., Peterboro, Ont.
HACK SAW BLADES AND FRAMES
*E. C. Atkins & Co., Inc., Hamilton, Ont.
HACK SAW MACHINES
*E. C. Atkins & Co., Inc., Hamilton, Ont.
HALL FURNITURE
The Geo. McLagan Furniture Co., Ltd., Stratford, Ont.
HANDLES (axe, pick, sledge hammers, etc.)
The Lachute Shuttle Co., Ltd., Lachute Mills, P.Q.
HANDLES, wood
Canada Spool & Bobbin Co., Ltd., Walkerton, Ont.
HAND SAWS
*E. C. Atkins & Co., Inc., Hamilton, Ont.
HANGERS
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
HARDWARE
*Richards-Wilcox Canadian Co., Ltd., London, Ont.
Taylor-Forbes Co., Ltd., Guelph, Ont.
HARNESS
Lamontagne, Ltd., Montreal, Que.
HATS, ladies' felt and straw
Toronto Hat Mfg. Co., Toronto.
HAULAGE, wire rope
*The Dominion Wire Rope Co., Ltd., Montreal, Que.
HEADING SAWS
*E. C. Atkins & Co., Inc., Hamilton, Ont.
HEATERS
*Waterous Engine Works Co., Ltd., Brantford, Ont.
HEATERS, feed water
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
HEATERS, WATER FEED
*Mason Regulator & Engineering Co., Ltd., Montreal, Que.
HEATING APPLIANCES
*C. A. Dunham Co., Ltd., Toronto.
*The Canadian Blower & Forge Co., Ltd., Kitchener, Ont.
HEATING SYSTEMS
*C. A. Dunham Co., Ltd., Toronto.
HEMLOCK, union and oak sole
Breithaupt Leather Co., Ltd., Kitchener, Ont.
HESSIANS
The Canadian Bag Co., Ltd., Montreal, Que.
HINGES
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
HOISTS, electric and pneumatic
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.
*Canadian Mead Morrison Co., Ltd., Montreal, Que.
*Northern Crane Works, Ltd., Walkerville, Ont.
HOSE, fire and rubber
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
*Gutta Percha & Rubber, Ltd., Toronto, Ont.
HOUSES, factory made
Wm. H. White, Ville St. Pierre, Montreal, Que.
HYDRAULIC TURBINES
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.
ICE CREEPERS
Parmenter & Bulloch Co., Ltd., Gananoque, Ont
ICE MACHINE EQUIPMENT
Canadian Ice Machine Co., Limited, Toronto, Ont.
ICE-MAKING MACHINERY
The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.
INGOT METALS
*Brown's Copper & Brass Rolling Mills, Ltd., New Toronto, Ont.
INSERTED TOOTH SAWS
*E. C. Atkins & Co., Inc., Hamilton, Ont.
INSULATING COMPOUNDS
*The Imperial Varnish & Color Co., Ltd., Toronto.
INSULATION VULCANIZED FIBRE
*The Diamond State Fibre Co. of Canada, Ltd., Toronto.
INTERLOCKING RUBBER TILING
*Gutta Percha & Rubber Mfg. Co., of Toronto, Ltd., Toronto, Ont.
IRON
*Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.
IRON AND STEEL BARS
*Burlington Steel Co., Ltd., Hamilton, Ont.
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
IRON STAIRWAYS
*Canada Wire & Iron Goods Co., Hamilton, Ont.
*Dennis Wire & Iron Works Co., London, Ont.
*McGregor & McIntyre, Ltd., Toronto, Ont.
IRONWORK, architectural
*Canada Wire & Iron Goods Co., Hamilton, Ont.
IRONWORK, ornamental
*Canada Wire & Iron Goods Co., Hamilton, Ont.
INDUSTRIAL DESIGN PATENTS
Harold C. Shipman & Co., Ottawa, Ont.
JAM, canned goods, etc.
E. D. Smith & Son, Ltd.
JAPANS, enamels, etc.
Berry Brothers, Inc., Walkerville, Ont.
A. Muirhead Co., Ltd., Toronto.
*The Imperial Varnish & Color Co., Ltd., Toronto, Ont.

For Display Advertisemt see Index, Page 241

JELLY POWDER
S. H. Ewing & Sons, Montreal.
JEWELRY, enamelled souvenir
*Caron Bros., Montreal, Que.
JEWELRY, gold-filled
*Caron Bros., Montreal, Que.
JOINTERS
*Canada Machinery Corporation, Ltd., Galt, Ont.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.
JOIST HANGERS
*Richards-Wilcox Canadian Co., Ltd., London, Ont.
JUNCTION BOXES, cable
*Standard Underground Cable Co. of Canada, Ltd., Hamilton, Ont.
KINDLING
Standard Fuel Co., Toronto, Ont.
KNIFE GRINDERS
*Canada Machinery Corporation, Ltd., Galt, Ont.
KNITTED GOODS
*Penman's, Ltd., Paris, Ont.
KNIVES
*Galt Knife Co., Ltd.
The Peter Hay Knife Co., Ltd., Galt, Ont.
Simonds Canada Saw Co., Ltd., Montreal, Que.
KNIVES, pulp and paper
Henry Disston & Sons, Toronto.
The Peter Hay Knife Co., Ltd., Galt, Ont.
KODAKS AND PHOTOGRAPHIC SUPPLIES
Canadian Kodak Co., Ltd., Toronto.
LABELS
Lawson & Jones, Ltd., London, Ont.
LABELS, lithographed
Consolidated Lithographing and Mfg. Co., Ltd., Montreal, Que.
Harris Lithographing Co., Ltd., Toronto, Ont.
LABORATORY SUPPLIES
Canadian Laboratory Supplies, Ltd., Toronto.
LACE LEATHER
F. C. McCordick, St. Catharines, Ont.
*The D. K. McLaren Belting Co., Ltd., Montreal, Que.
*The J. C. McLaren Belting Co., Ltd., Montreal, Que.
LADDERS
Stratford Mfg. Co., Ltd., Stratford, Ont.
LADLES, foundry
*Northern Crane Works, Ltd., Walkerville, Ont.
LAMPS, Gasoline, Vapor.
Coleman Lamp Company, Ltd., Toronto.
LATH
The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.
LATHE CHUCKS
*Ker & Goodwin, Brantford, Ont.
LATHES
*Canada Machinery Corporation, Ltd., Galt, Ont.
LAUNCHES
Peterboro Canoe Co., Ltd., Peterboro, Ont.
LAWN MOWERS
Taylor-Forbes Co., Ltd., Guelph, Ont.
LAWN SWINGS
Stratford Mfg. Co., Ltd., Stratford, Ont.
LAVATORIES, enameled
Amherst Foundry Co., Ltd., Amherst, N.S.
LAMPS (ELECTRIC)
The Dalyte Electric Limited, Guelph, Ont.
LAUNDRY SINKS
Amherst Foundry Co., Ltd., Amherst, N.S.
LEAD
*Consolidated Mining & Smelting Co. of Canada, Ltd., Montreal.
LEAD GRINDERS
Benjamin Moore & Co., Ltd., Toronto, Ont.
LEAD PIPE
*Hoyt Metal Co., Toronto, Ont.
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
Toronto Plate Glass Importing Co., Ltd., Toronto, Ont.
*The Canada Metal Co., Toronto.
LEAD SHEET
Toronto Plate Glass Importing Co., Ltd., Toronto, Ont.
LEATHER
The Robson Leather Co., Ltd., Oshawa, Ont.
LEATHER, bookbinders'
Clarke & Clarke, Ltd., Toronto.
LEATHER, fancy
Clarke & Clarke, Ltd., Toronto.
LEATHER GOODS
Lamontagne, Ltd., Montreal, Que.
LEATHER GOODS, Fine
Federated Leather Goods Co., Ltd., Montreal, Que.
Canadian Leather Products, Ltd., Toronto, Ont.
LEATHER, hemlock, union and oak sole
The Breithaupt Leather Co., Ltd., Kitchener, Ont.
LEATHER, patent colt and side leather
*A. R. Clarke & Co., Ltd., Toronto.
LEATHER, sheep skin, etc.
Clarke & Clarke, Ltd., Toronto.
LEATHER, upholstering
Clarke & Clarke, Ltd., Toronto.
LEATHER, upper
A. Davis & Son., Ltd., Kingston, Ont.
King Brothers Co., Ltd., Whitby, Ont.
LINK-BELT, Ewart and saw mill riveted
*Canadian Link-Belt Co., Toronto.
LINOLEUM
Dominion Oil Cloth and Linoleum Co., Ltd., Montreal, Que.
LITHOGRAPHERS
American Bank Note Co., Ottawa, Ont.
Consolidated Lithographing and Mfg. Co., Ltd., Montreal, Que.
Harris Lithographing Co., Ltd., Toronto, Ont.
The Federated Press, Limited, Montreal, Que.
LOCKERS
*Canada Wire & Iron Goods Co., Hamilton, Ont.
*Dennis Wire & Iron Works Co., London, Ont.
*Geo. B. Meadows, Wire, Iron and Brass Works Co., Toronto. Ont.
LOCOMOTIVES, industrial
*Montreal Locomotive Works, Ltd., Montreal, Que.
LOCOMOTIVE & MARINE BRASS WORKS
The James Morrison Brass Mfg. Co., Ltd., Toronto.
LOOSE LEAF SYSTEMS
Copeland-Chatterson Co., Ltd., Brampton, Ont.
LUBRICATING FLAKE GRAPHITE
Black Donald Graphite Company, Limited, Calabogie, Ont.
LUGS, for silos and water tanks
*Ontario Wind Engine & Pump Co., Ltd., Toronto.
LUMBER
The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.
LUMBER, asbestos
*Eureka Mineral Wool & Asbestos Co., Toronto, Ont.
LUMBER, spruce and pine, cedar railway ties and shingles
*Bathurst Lumber Co., Ltd., Bathurst, N.B.
LUMBER, red pine and spruce
Gillies Bros., Ltd., Braeside, Ont.
LUMBER, White pine
Gillies Bros., Ltd., Braeside, Ont.
LUMBERING BLANKETS
Slingsby Mfg. Co., Ltd., Brantford, Ont.
MACHINE DESIGNING.
Harold C. Shipman & Co., Ottawa, Ont.
MACHINE KNIVES
*Galt Knife Co., Ltd.
*E. C. Atkins & Co., Inc., Hamilton, Ont.
Henry Disston & Sons, Toronto.
MACHINE TOOLS
*Canada Machinery Corporation, Ltd., Galt, Ont.
*John Bertram & Sons Co., Ltd., Dundas, Ont.
MACHINE WORK, special and repairs
*Canadian Rumely Co., Ltd., Toronto, Ont.
MACHINERY, special, designing and developing.
Larsen & Shaw, Ltd., Walkerton.
BAKERS
Fletcher Mfg. Co., Ltd., Toronto.
MACHINERY AND UTENSILS FOR CANDY
Fletcher Mfg. Co., Ltd., Toronto.
MACHINERY AND UTENSILS FOR ICE CREAM
Fletcher Mfg. Co., Ltd., Toronto.
MACHINERY, Conveying
*Canadian Link-Belt Company, Ltd., Toronto, Ont.
*Canadian Mathews Gravity Carrier Co., Ltd., Toronto.
MACHINERY, flour mill
*Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
MACHINERY, ice cream
J. J. McLaughlin, Ltd., Toronto.
MACHINERY, grinding
*Canadian Hart Wheels, Ltd., Hamilton, Ont.
*Canadian Mead Morrison Co., Ltd., Montreal, Que.
J. & R. Weir, Montreal, Que.
*Northern Crane Works, Ltd., Walkerville, Ont.
MACHINERY, iron working
*Canada Machinery Corporation, Ltd., Galt, Ont.
*John Bertram & Sons Co., Ltd., Dundas, Ont.
MACHINERY, pulp mill
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.
*Dominion Engineering Works, Limited, Montreal, Que.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.
MACHINERY, punching and shearing
*Canada Machinery Corporation, Ltd., Galt, Ont.
*John Bertram & Sons Co., Ltd., Dundas, Ont.
MACHINERY, railroad and car-shop
*Canada Machinery Corporation, Ltd., Galt, Ont.
*John Bertram & Sons Co., Ltd., Dundas, Ont.
MACHINERY, roadmaking
Sawyer-Massey Co., Ltd., Hamilton, Ont.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.
MACHINERY, sawmill
The E. Long Mfg. Co., Ltd., Orillia, Ont.
P. Payette & Co., Pentanguishene, Ont.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.
*Yates, P. B., Machine Co., Ltd., Hamilton, Ont.
MACHINERY, sheet metal working
*Canada Machinery Corporation, Ltd., Galt, Ont.
MACHINERY, woodworking
*Canada Machinery Corporation, Ltd., Galt, Ont.
*Yates, P. B., Machine Co., Ltd., Hamilton, Ont.
Preston Woodworking Machinery Co., Ltd., Preston, Ont.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.
MACHINES, painting
Spramotor Co., London, Ont.
MAGNESITE
*Canadian Carbonate Co., Montreal, Que.
MALLEABLE IRON CASTINGS
Malleable Castings Co., Ltd., Smith's Falls, Ont.
*Galt Malleable Iron Co., Ltd., Galt, Ont.
MARTINGALE RINGS AND SLIDE LOOPS
The Arlington Co. of Canada, Ltd., Toronto, Ont.
MATCHERS
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.
MATCHES
*The E. B. Eddy Co., Ltd., Hull, Que.
MECHANICAL STOKERS
*Under-feed Stoker Co. of Canada, Ltd., Toronto.
METAL, babbitt
Alonzo W. Spooner, Ltd., Port Hope, Ont.
*Canada Metal Co., Toronto, Ont.
METAL CEILINGS
*The Pedlar People, Ltd., Oshawa, Ont.
MACHINERY AND UTENSILS FOR
*The A. B. Ormsby Co., Ltd., Toronto, Ont.
METAL LATH
*The Pedlar People, Ltd., Oshawa, Ont.
METAL LATH
*Trussed Concrete Steel Company of Canada, Ltd., Walkerville, Ont.
METAL PACKING
*Garlock Packing Co., Hamilton, Ont.
METAL, spinning and stamping
*The Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.
METAL PROTECTIVE PAINTS
Sturgeons Limited, Toronto.
METAL SAWS
*E. C. Atkins & Co., Inc., Hamilton, Ont.
METAL SHINGLES
*The Pedlar People, Ltd., Oshawa, Ont.
*The A. B. Ormsby Co., Ltd., Toronto, Ont.
MILK DEALERS' MACHINERY AND SUPPLIES
De Laval Dairy Supply Co., Ltd., Peterboro, Ont.
MILLBOARD, asbestos
*Eureka Mineral Wool & Asbestos Co., Toronto.
MILLING CUTTERS
*Pratt & Whitney Co. of Canada, Dundas, Ont.
MILLING MACHINES
*Ford Smith Machine Co., Ltd., Hamilton, Ont.
MILL RIVITED
*Canadian Link-Belt Company, Ltd., Toronto, Ont.
MITTS AND GLOVES, Indian, tan, red deerskins
Holt, Renfrew, Ltd., Quebec, Que.
*A. R. Clarke & Co., Ltd., Toronto.
MIXERS, chocolate, dough and paint
Fletcher Mfg. Co., Ltd., Toronto.
MOCCASINS AND SLIPPERS, Indian tanned leathers
Holt, Renfrew, Ltd., Quebec, Que.
MONEL METAL
*International Nickel Co. of Canada, Ltd., Toronto.
MORTISERS
*Canada Machinery Corporation, Ltd., Galt, Ont.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.
MOTION PICTURES
Pathescope of Canada, Limited, Toronto.
Filmcraft Industries, Limited, Toronto, Ont.
MOTOR CARS
*Ford Co. of Canada, Ford, Ont.
MOTORS, electric (alternating current)
*Canadian Westinghouse Co., Ltd., Hamilton, Ont.
*Jones & Moore Electric Co., Ltd., Toronto, Ont.
*Canadian Crocker-Wheeler Co., Ltd., St. Catharines, Ont.
*T. & H. Electric Co., Hamilton, Ont.
MOTORS, electric (direct current)
*Canadian Westinghouse Co., Ltd., Hamilton, Ont.
*Jones & Moore Electric Co., Ltd., Toronto, Ont.
*T. & H. Electric Co., Hamilton.
MOTORS, electric (repairing)
*T. & H. Electric Co., Hamilton.
MOTOR TRUCKS
Mapleleaf Manufacturing Company, Ltd., Montreal Que.
MOULDERS
*Canada Machinery Corporation, Ltd., Galt, Ont.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.
NAILS
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
NAILS, copper
Parmenter & Bullock Co., Ltd., Gananoque, Ont.
NAILS, wire
Parmenter & Bullock Co., Ltd., Gananoque, Ont.

* For Display Advertisement see Index, Page 241

NAPHTHA
*The Imperial Oil Co., Ltd., Toronto, Ont.
NICKEL CASTINGS
*International Nickel Co. of Canada, Ltd., Toronto.
NICKEL METAL
*Deloro Smelting & Refining Co., Ltd., Deloro, Ont.
*International Nickel Co. of Canada, Ltd., Toronto.
NICKEL OXIDE
*Deloro Smelting & Refining Co., Ltd., Deloro, Ont.
Coniagas Reduction Co., Ltd., St. Catharines, Ont.
*International Nickel Co. of Canada, Ltd., Toronto.
NUTS
*John Morrow Screw & Nut Co., Ltd., Ingersoll, Ont.
*The National Acme Mfg. Co., Montreal, Que.
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
OAKUM, plumbers, Canadian Navy Factory Waste & Metal Co., Montreal, Que.
OAT CRUSHERS AND FLAKERS
J. Fleury's Sons, Aurora, Ont.
OFFICE CHAIRS, Etc.
The Macey Office Equipment Co., Toronto.
OFFICE DESKS
*Goderich Organ Co., Goderich, Ont
OFFICE EQUIPMENT
*Office Specialty Co., Newmarket, Ont.
OFFICE FURNITURE
*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.
OILS
*A. Ramsay & Son Co., Montreal, Que.
OIL FILTRATION AND CIRCULATING SYSTEMS
*S. F. Bowser & Co., Toronto, Ont.
OIL STORAGE SYSTEMS, self-measuring
*S. F. Bowser & Co., Toronto, Ont
OIL COMPANIES
*Canadian Oil Cos., Toronto.
Commercial Oil Co., Ltd., Hamilton, Ont.
*Imperial Oil Co., Toronto.
OILS (petroleum products)
*British American Oil Co., Ltd., Toronto, Ont.
*The Imperial Oil Co., Toronto.
OILS, road
*The Barrett Co., Ltd., Toronto and Montreal.
OILCLOTHS, floor and table
Dominion Oil Cloth and Linoleum Co., Ltd., Montreal, Que.
ORGANS
Casavant Freres, Limitee, St Hyacinthe, Que.
*Goderich Organ Co., Goderich, Ont.
ORGANS, parlor
*Goderich Organ Co., Goderich, Ont
ORGANS, pipe
Casavant Freres, Limitee, St Hyacinthe, Que.
ORGANS, reed
Bell Piano & Organ Co., Ltd., Guelph, Ont.
ORNAMENTAL IRON WORK
*Canada Wire & Iron Goods Co., Hamilton, Ont.
*Dennis Wire & Iron Works Co., London, Ont.
*The Geo. B. Meadows, Toronto Iron & Brass Goods Works Co., Ltd., Toronto, Ont.
*McGregor & McIntyre, Ltd., Toronto, Ont.
OVERALLS
Peerless Overall Co., Rock Island, Que.
Walker Pant & Shirt Co., Walkerville and Chatham, Ont.
OVERCOATINGS
Rosamond Woollen Co., Almonte, Ont.
OVERHEAD RUNWAYS
*MacKinnon Steel Co., Ltd., Sherbrooke, Que.
*Richards-Wilcox Canadian Co Ltd., London, Ont.

OXY-ACETYLENE WELDING
*L'Air Liquide Society, Montreal, Que.
*The Prest-O-Lite Co., Inc., Toronto
OXYGEN
Dominion Oxygen Co., Ltd., Toronto.
*L'Air Liquide Society, Montreal, Que.
PACKING BOXES
Barchard & Co., Ltd., Toronto.
PACKING, engine
*Garlock Packing Co., Hamilton, Ont.
PACKING, Metallic-Flexible
Beveridge Supply Co., Ltd., Montreal, Que.
PACKING, rubber
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
*Gutta Percha & Rubber Mfg. Co. of Toronto, Ltd.
*Jenkins Bros., Ltd., Montreal, Que.
PAD HOOKS
Parmenter & Bulloch Co., Ltd., Gananoque, Ont.
PAILS AND TUBS, wooden
The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.
PAINTERS' SUPPLIES
A. Muirhead Co., Ltd., Toronto.
PAINTS AND VARNISHES
Berry Brothers, Inc., Walkerville, Ont.
A. Muirhead Co., Ltd., Toronto.
Benjamin Moore & Co., Ltd., Toronto, Ont.
Dominion Paint Works, Limited, Walkerville, Ont.
*The Imperial Varnish & Color Co., Ltd., Toronto, Ont.
The Staneland Co., Ltd., Victoria, B.C.
*A Ramsay & Sons Co., Montreal, Que.
Standard Paint Co. of Canada, Ltd., Montreal, Que.
PAINTS, preservative
Dominion Paint Works, Limited, Walkerville, Ont.
Standard Paint Co. of Canada, Ltd., Montreal, Que.
*The Barrett Co., Ltd., Toronto and Montreal.
PAPER BOARDS & BAGS
Beveridge Supply Co., Ltd., Montreal, Que.
PAPER BOXES
Standard Paper Box Company, Ltd., Montreal, Que.
King Paper Box Co., Ltd., Montreal, Que.
PAPER, coated, book and label
*Provincial Paper Mills, Ltd., Georgetown, Ont
PAPER, coated box board
*Provincial Paper Mills, Ltd., Georgetown, Ont.
PAPER, coated cover
*Provincial Paper Mills, Ltd., Georgetown, Ont.
PAPER, envelope
*Provincial Paper Mills, Ltd., Georgetown, Ont.
The Toronto Paper Mfg. Co., Cornwall, Ont.
PAPER, enamelled blotting
*Provincial Paper Mills, Ltd., Georgetown, Ont.
PAPER, label
*Provincial Paper Mills, Ltd., Georgetown, Ont.
PAPER, ledger
*Howard Smith Paper Mills, Ltd., Montreal, Que.
*Rolland Paper Co., Ltd., Montreal, Que.
The Toronto Paper Mfg. Co., Cornwall, Ont.
PAPER, super-book
The Toronto Paper Mfg. Co., Cornwall, Ont.
PAPER, writing
The Toronto Paper Mfg. Co., Cornwall, Ont.
*Howard Smith Paper Mills, Ltd., Montreal, Que.
*Rolland Paper Co., Ltd., Montreal, Que.
PAPERS, bond
*Howard Smith Paper Mills, Ltd., Montreal, Que.
*Rolland Paper Co., Ltd., Montreal, Que.

PAPERS, building
*Bathurst Lumber Co., Ltd., Bathurst, N.B.
*The Riordon Pulp & Paper Co., Montreal, Que.
Standard Paint Co. of Canada, Ltd., Montreal, Que.
PARLOR SUNDRIES
The Geo. McLagan Furniture Co., Ltd., Stratford, Ont.
PATENTS
Fetherstonhaugh & Co., Toronto.
*Ridout & Maybee, Toronto, Ont.
*Harold C. Shipman & Co., Ottawa.
PATENT LITIGATION
*Ridout & Maybee, Toronto, Ont.
*Harold C. Shipman & Co., Ottawa, Ont.
PAVING MATERIAL
*Trussed Concrete Steel Company of Canada, Ltd., Walkerville, Ont.
PAY ROLL AUDITS
*International Business Machines, Ltd., Toronto, Ont.
PERFORATED METALS
*Canada Wire & Iron Goods Co., Hamilton, Ont.
PERFORATED MUSIC ROLLS
The Otto Higel Co., Ltd., Toronto.
PERFUMES AND TOILET PREPARATIONS
Sovereign Perfumes, Ltd., Toronto.
PETROLEUM PRODUCTS
*The Imperial Oil Co., Ltd., Toronto, Ont.
PHOTO MAILERS
*Thompson & Norris Co., of Canada, Ltd., Toronto and Montreal.
PIANO ACTIONS
The Otto Higel Co., Ltd., Toronto.
PIANO KEYS
The Otto Higel Co., Ltd., Toronto.
PIANO, player actions
The Otto Higel Co., Ltd., Toronto.
PIANOS AND PLAYER PIANOS
Bell Piano & Organ Co., Ltd., Guelph, Ont.
PIANO STOOLS AND BENCHES
*Goderich Organ Co., Goderich, Ont.
PIG IRON
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
*M. A. Hanna & Co., Toronto.
*Algoma Steel Corporation.
PINS, society, emblems and badges
*Caron Bros., Montreal, Que.
PIPE, cast iron, for water and gas
National Iron Works, Ltd., Toronto, Ont.
PIPE COUPLINGS
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
PIPE COVERINGS
*Eureka Mineral Wood & Asbestos Co., Toronto, Ont.
PIPES, culvert
*The Pedlar People, Ltd., Oshawa, Ont.
PIPE AND NIPPLES, black and galvanized
*Canadian Tube & Iron Co., Ltd., Montreal, Que.
PIPE, sewer
Hamilton & Toronto Sewer Pipe Co., Ltd., Hamilton, Ont.
PIPE, soil and fittings
Anthes Foundry, Ltd., Toronto and Winnipeg.
Warden King Ltd., Montreal, Que.
PISTON RODS
*The Canadian Drawn Steel Co., Ltd., Hamilton, Ont.
*Union Drawn Steel Co., Ltd., Hamilton, Ont.
PLANERS
*Canada Machinery Corporation, Ltd., Galt, Ont.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont
PLASTERING TROWELS
*E. C. Atkins & Co., Inc., Hamilton, Ont.
PLOWS
J. Fleury's Sons, Aurora, Ont.
PNEUMATIC DRILLS
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.

PLUMBERS' SUPPLIES
The Garth Co., Montreal, Que.
The James Morrison Brass Mfg. Co., Ltd., Toronto, Ont.
Toronto Plate Glass Importing Co., Ltd., Toronto, Ont.
POLE LINE MATERIAL (wooden insulator top pins, side blocks, pole steps, cross arms)
The Lachute Shuttle Co., Ltd., Lachute Mills, P.Q.
POLES, flag
*Ontario Wind Engine & Pump Co., Ltd., Toronto, Ont.
POLISHING MACHINERY
*Ford Smith Machine Co., Ltd., Hamilton, Ont.
PORK PACKERS AND CHEESE EXPORTERS
The Ingersoll Packing Co., Ltd., Ingersoll, Ont.
POWDER, blasting
Canadian Explosives, Ltd., Montreal, Que.
POWER TRANSMISSION MACHINERY
Dodge Manufacturing Co. of Canada, Ltd., Toronto.
POWER PRESSES
*Hydraulic Machinery Co., Ltd., Montreal, Que.
PRESSES, hydraulic
*The Hydraulic Machinery Co., Limited, Montreal.
PRESSES, sheet metal stamping
*Canada Machinery Corporation, Ltd., Galt, Ont.
PRESSES, veneer
*Canada Machinery Corporation, Ltd., Galt, Ont.
PRINTING AND LITHOGRAPHING
Lawson & Jones, Ltd., London, Ont.
The Federated Press, Limited, Montreal, Que.
PRINTING & LITHOGRAPHIC INKS.
Charles Bush, Limited, Toronto.
PULLEYS
*Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
PULLEYS, Fibre
*The Diamond State Fibre Co. of Canada, Ltd., Toronto.
PULLEYS, wood split
*Bernard Industrial Co., Fortierville, P.Q.
PULLEYS, Wood Split, Iron and steel.
Dodge Manufacturing Co. of Canada, Ltd., Toronto.
PULP, bleached sulphite
*Riordan Sales Co., Ltd., Montreal.
PULP, unbleached sulphite
*Riordan Sales Co., Ltd., Montreal.
PULP, sulphate and sulphite
*Bathurst Lumber Co., Ltd., Bathurst, N.B.
PULP AND PAPER MILL MACHINERY
*The Hydraulic Machinery Co., Limited, Montreal.
PUMPS
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.
*Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
*E. Leonard & Sons, Ltd., London, Ont.
*Ontario Wind Engine & Pump Co., Ltd., Toronto, Ont.
*Smart-Turner Machine Co., Ltd., Hamilton, Ont.
Spramotor Co., London, Ont.
*The Electric Steel & Metals Co., Ltd., Welland, Ont.
PUMPS, boiler feed
*Smart-Turner Machine Co., Ltd., Hamilton, Ont.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
PUMPS, centrifugal
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.
*Canadian Mead Morrison Co., Ltd., Montreal, Que.
*Dominion Engineering Works, Limited, Montreal, Que.
*Dominion Forge & Stamping Co., Ltd., Walkerville, Ont.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Smart-Turner Machine Co., Ltd., Hamilton, Ont.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.

*For Display Advertisement see Index. Page 241

PUMPS, hydraulic
*The Hydraulic Machinery Co., Limited, Montreal.

PUMPS, turbine and reciprocating
*Smart-Turner Machine Co., Ltd., Hamilton, Ont.

PUNCHES
*Pratt & Whitney Co., Dundas, Ont.

RADIATORS
Taylor-Forbes Co., Ltd., Guelph, Ont.
Warden King, Ltd., Montreal, Que.

RAILS (STEEL).
*Algoma Steel Corporation.

RAILINGS, brass and iron
*Dennis Wire & Iron Works Co., London, Ont.

RAILWAY SUPPLIES
*Canadian Steel Foundries, Ltd., Montreal, Que.
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
B. J. Coghlin Co., Ltd., Montreal, Que.

READY-TO-WEAR GARMENTS, ladies'
H. C. Boulter Co., Ltd., Toronto.

REAMERS
*Pratt & Whitney Co., Dundas, Ont.
*Butterfield & Co., Rock Island, P.Q.

RECEPTACLES, fibre
*The Diamond State Fibre Co. of Canada, Ltd., Toronto.

REFRIGERATORS
Sanderson-Harold Co., Ltd., Paris, Ont.

REFRIGERATING MACHINERY
The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.

REFRIGERATING EQUIPMENT.
Canadian Ice Machine Co., Ltd., Toronto, Ont.

REFRIGERATORS, store, homes and institutions
Ham & Nott Co., Ltd., Brantford, Ont.
*John Hillock & Co., Ltd., Toronto.

REINFORCEMENT BARS
*Burlington Steel Co., Ltd., Hamilton, Ont.
*The Steel Co. of Canada, Ltd., Hamilton, Ont.

REINFORCED CONCRETE
*Trussed Concrete Steel Company of Canada, Ltd., Walkerville, Ont.

REINFORCEMENT FOR CONCRETE
*Canada Wire & Iron Goods Co., Hamilton, Ont.

REINFORCEMENT FOR CONCRETE ROOFING, metal
*The Pedlar People, Ltd., Oshawa, Ont.

REVOLVING DOORS
*A. B. Ormsby Co., Ltd., Toronto

RINGS, gold
*Caron Bros., Montreal, Que.

RIVETS
*Canadian Tube & Iron Co., Ltd., Montreal, Que.
*The Steel Co. of Canada, Ltd., Hamilton, Ont.

RIVETS, bifurcated and tubular
Parmenter & Bullock Co., Ltd., Gananoque, Ont.

RIVETS AND BURRS, iron, copper and brass
Parmenter & Bullock Co., Ltd., Gananoque, Ont.

ROCK DRILLS
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.

ROLLING STEEL DOORS
*A. B. Ormsby Co., Ltd., Toronto.

ROOFING, metal
*A. B. Ormsby Co., Ltd., Toronto.

ROOFINGS, plastic, liquid, rubber
Beveridge Supply Co., Ltd., Montreal, Que.

ROOFING, ready to lay
Standard Paint Co. of Canada, Ltd., Montreal, Que.
*The Barrett Co., Ltd., Toronto and Montreal.

ROOF TRUSSES
*The Canadian Bridge Co., Ltd., Walkerville, Ont.
*Dominion Bridge Co., Ltd., Montreal, Que.

ROPE
*Doon Twines, Limited, Kitchener, Ontario.
*Shurly & Derrett, Ltd., Toronto.

ROPE, cotton
Hamilton Cotton Co., Hamilton, Ont.

RUBBER FOOTWEAR
*Gutta Percha & Rubber Ltd., Toronto, Ont.
The Miner Rubber Co., Ltd., Grandy, Que.
Ames—Holden—McCready, Limited, Montreal, Que.

RUBBER GOODS
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
*Gutta Percha & Rubber Limited, Toronto.
Ames—Holden—McCready, Limited, Montreal, Que.

RUBBER MACHINERY
*The Hydraulic Machinery Co., Limited. Montreal.

RUBBER MACHINERY MAKERS
The Canadian Consolidated Rubber Co., Ltdd., Rubber Machinery Shops, Kitchener, Ont.

RUBBER MILL MACHINERY
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.

RUBBER PACKING
*Garlock Packing Co., Hamilton, Ont.

RULES
The Lufkin Rule Co. of Canada, Ltd., Windsor, Ont.

SADDLERY HARDWARE
*Dominion Forge & Stamping Co., Walkerville, Ont.

SAFES
*Goldie & McCulloch Co., Ltd. Galt, Ont.

SALT
*Canadian Salt Co., Ltd., Windsor, Ont.
Dominion Salt Co., Ltd., Sarnia, Ont.

SAMPLE CASES
*The M. Langmuir Mfg. Co., of Toronto, Ltd., Toronto, Ont.

SAND (For all Purposes)
Carrol Brothers, Sherkston, Ont.
J. Eveleigh & Co., Ltd., Montreal, Que.

SAND RAMMERS
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.

SANITARY PAPER TOWELS
*E. B. Eddy Co., Ltd., Hull, Que.

SASH CORD, cotton
Hamilton Cotton Co., Hamilton, Ont.

SAVE-ALLS
*The Hydraulic Machinery Co., Limited. Montreal.

SAW SHARPENING MACHINERY
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

SAWS
*E. C. Atkins & Co., Ltd., Hamilton, Ont.
Henry Disston & Sons, Ltd., Toronto, Ont.
Shurly & Deitrich, Galt, Ont.

SAWS, cross-cut and band
*Canada Machinery Corporation, Ltd., Galt, Ont.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.
Shurly & Deitrich, Galt, Ont.

SAWS, circular mill
Shurly & Deitrich, Galt, Ont.

SAWS, of all kinds
Simonds Canada Saw Co., Ltd., Montreal, Que.

SAWS, rip
*Canada Machinery Corporation, Ltd., Galt, Ont.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.
Shurly & Deitrich, Galt, Ont.

SAWMILLS
*The Waterous Engine Works Co., Ltd., Brantford, Ont.

SCALES
*Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.

SCREENS
*Canada Wire & Iron Goods Co., Hamilton, Ont.

SCREEN DOORS AND WINDOWS
Sanderson-Harold Co., Ltd., Paris, Ont.
Ham & Nott Co., Ltd., Brantford, Ont.

SCREENS; Folding Draft
The Stratford Mfg. Co., Limited, Stratford, Ont.

SCREWS
*John Morrow Screw & Nut Co., Ltd., Ingersoll, Ont.
*National Acme Company, Montreal, Que.
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
*Torrington Company, Limited, Upper Bedford, Que.

SCREW PLATES
*Butterfield & Co., Rock Island, P.Q.

SEATS; Park and Grand Stand
The Stratford Mfg. Co., Limited, Stratford, Ont.

SECURITIES, engraved
American Bank Note Co., Ottawa, Ont.

SERGES
Rosamond Woollen Co., Almonte, Ont.

SEWAGE DISPOSAL SYSTEMS
Anthes Foundry, Ltd., Toronto.

SEWAGE SCREENS
*The Hydraulic Machinery Co., Limited, Montreal.

SHAFTING
*Canadian Drawn Steel Co., Ltd., Hamilton, Ont.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Union Drawn Steel Co., Ltd., Hamilton, Ont.

SHANTY BLANKETS
Slingsby Mfg. Co., Ltd., Brantford, Ont.

SHAPERS
*Canada Machinery Corporation, Ltd., Galt, Ont.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.

SHEAR BLADES, iron
*Galt Knife Co., Ltd.
The Peter Hay Knife Co., Ltd., Galt, Ont.

SHEATHING
*The Barrett Co., Ltd., Toronto and Montreal.

SHEATHING, asbestos corrugated
*Eureka Mineral Wool & Asbestos Co., Toronto, Ont.
Dodge Manufacturing Co. of Canada, Ltd., Toronto.

SHEET METAL STAMPINGS
Acme Stamping & Tool Works, Ltd., Hamilton, Ont.
*The Pedlar People, Ltd., Oshawa, Ont.
*The A. B. Ormsby Co., Ltd., Toronto, Ont.

SHEETS, fibre
*The Diamond State Fibre Co. of Canada, Ltd., Toronto.

SHEETS, galvanized
*Dominion Sheet Metal Co., Ltd., Hamilton, Ont.
*The Pedlar People, Ltd., Oshawa, Ont.

SHINGLES
*Bathurst Lumber Co., Ltd., Bathurst, N.B.

SHINGLE SAWS
*E. C. Atkins & Co., Inc., Hamilton, Ont.

SHINGLE STAINS
Sturgeons, Limited, Toronto.

SHIP BUILDERS
J. & R. Weir, Montreal, Que.

SHIRTS
John W. Peck & Co., Ltd., Montreal, Que.

SHIRTS, workmen's
*A. R. Clarke & Co., Ltd., Toronto.

SHOE PEGWOOD
O. Chalifour, Quebec, Que.

SHOE LININGS
Galt Knitting Co., Ltd., Galt, Ont.

SHOOKS
Barchard & Co., Ltd., Toronto.

SIGNAL CELLS-RAILWAY
*Canadian National Carbon Co., Ltd., Toronto.

SILENT CHAIN DRIVES
*Canadian Link-Belt Company, Ltd., Toronto, Ont.

SILVER BULLION
Coniagas Reduction Co., Ltd., St. Catharines, Ont.
*Deloro Smelting & Refining Co., Ltd., Deloro, Ont.

SILVERSMITH
Standard Silver Co., Toronto, Ont.

SILVERWARE, sterling
Roden Bros., Ltd., Toronto, Ont.

SINKS, enamelled
Amherst Foundry Co., Ltd., Amherst, N.S.

SKIFFS
Peterboro Canoe Co., Ltd., Peterboro, Ont.

SKYLIGHTS
*A. B. Ormsby Co., Ltd., Toronto.
*The Pedlar People, Ltd., Oshawa, Ont.

SLOTTERS
*Canada Machinery Corporation, Ltd., Galt, Ont.

SMOKE CONSUMERS
*Under-Feed Stoker Company of Canada, Limited, Toronto.

SMOKE-STACKS
*Canadian Chicago Bridge & Iron Co., Ltd., Bridgeburg, Ont.
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*E. Leonard & Sons, Limited, London, Ont.
*MacKinnon Steel Co., Ltd., Sherbrooke, Que.
*Steel Trough & Machine Co., Ltd., Tweed, Ont.

SOAPS
J. Barsalou & Co., Ltd., Montreal.

SOAP (soft, oil)
*The Imperial Varnish & Color Co., Ltd., Toronto, Ont.

SODA ASH
Brunner, Mond Canada, Limited, Amherstburg, Ont.

SODA WATER FOUNTAINS
J. J. McLaughlin, Ltd., Toronto.

SODA WATER FOUNTAINS AND ACCESSORIES
Fletcher Mfg. Co., Ltd., Toronto.

SOIL PIPE
Anthes Foundry, Ltd., Toronto.

SOLDER
Alonzo W. Spooner, Ltd., Port Hope, Ont.
*Canada Metal Co., Toronto, Ont.
*Hoyt Metal Co., Toronto, Ont.
Magnolia Metal Co. of Canada, Ltd., Montreal, Que.

SOLDER, silver
Geo. H. Lees & Co., Hamilton, Ont.

SOLDER, wire and bar
American Can Co., Montreal, and Hamilton.

SNOWSHOES
Holt, Renfrew, Ltd., Quebec, Que.

SPECIAL MACHINERY
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.

SPECIALTIES, SWAGED AND THREADED WIRE
*Torrington Company, Limited, Upper Bedford, Que.

SPELTER
*Consolidated Mining & Smelting Co. of Canada, Ltd., Montreal.

SPIRAL CONVEYORS
*Canadian Mathews Gravity Carrier Co., Ltd., Toronto, Ont.
Dodge Manufacturing Co. of Canada, Ltd., Toronto.

SPLIT PEAS
H. Murton, Ltd., Guelph, Ont.

SPOOLS
Canada Spool & Bobbin Co., Ltd., Walkerton, Ont.

SPORTING MEDALS AND TROPHIES
Roden Bros., Ltd., Toronto, Ont.

SPRAYERS
Spramotor Co., London, Ont.

SPRING COTTERS
*Richards-Wilcox Canadian Co., Ltd., London, Ont.

SPRINGS
*Canadian Steel Foundries, Ltd., Montreal, Que.
B. J. Coghlin Co., Ltd., Montreal.
Guelph Spring & Axle Co., Ltd., Guelph, Ont.

SPRINGS, carriage and automobile
Guelph Spring & Axle Co., Ltd.,

SPRING SHACKLE BOLTS
*John Morrow Screw & Nut Co., Ltd., Ingersoll, Ont.

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SPRINKLER SYSTEMS
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
*The Bennett & Wright Co., Ltd., Toronto, Ont.
*Purdy, Mansell, Ltd., Toronto.

SPROCKET WHEELS
*Canadian Link-Belt Company, Ltd., Dodge Manufacturing Co. of Can- Toronto, Ont.

STAINS, creosote shingle
A. Muirhead Co., Ltd., Toronto.

STAMPS, steel, brass and rubber
Pritchard-Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

STAMPINGS, steel, brass, aluminum, etc.
Larsen & Shaw, Ltd., Walkerton.

STATIONERY, office
Harris Lithographing Co., Toronto.

STEAM PIPE AND BOILER COVERINGS, asbestos
*Eureka Mineral Wool & Asbestos Co., Toronto.

STEAM SHOVELS
*Canadian Mead Morrison Co., Ltd., Montreal, Que.

STEAM SPECIALTIES
*C. A. Dunham Co., Ltd., Toronto.

STEAM TRAPS
*C. A. Dunham Co., Ltd., Toronto.

STEEL
*Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.
*Burlington Steel Co., Ltd., Hamilton, Ont.
*MacKinnon Steel Co., Ltd., Sherbrooke, Que.

STEEL BILLETS AND BLOOMS
*The Steel Co. of Canada, Ltd., Hamilton, Ont.

STEEL BUILDINGS
*The Canadian Bridge Co., Ltd., Walkerville, Ont.
*Dominion Bridge Co., Ltd., Montreal, Que.
*Hamilton Bridge Works Co., Ltd., Hamilton, Ont.
*Maritime Bridge Co., Ltd., New Glasgow, N.S.
*McGregor & McIntyre, Ltd., Toronto, Ont.
*MacKinnon Steel Co., Limited, Sherbrooke, P.Q.
*The Pedlar People, Ltd., Oshawa, Ont.
*The A. B. Ormsby Co., Ltd., Toronto, Ont.

STEEL CASTINGS
Beauchemin & Fils, Ltd., Sorel, Que.
*Canadian Steel Foundries, Ltd., Montreal, Que.
*Dominion Foundries and Steel Co., Ltd., Hamilton, Ont.
*Electric Steel & Metals Co., Ltd., Welland, Ont.

STEEL DOORS, rolling
*The A. B. Ormsby Co., Ltd., Toronto, Ont.

STEEL FILING EQUIPMENT
*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.

STEEL LATH
*Trussed Concrete Steel Company of Canada, Ltd., Walkerville, Ont.

STEEL PLATE WORK
*Canadian Chicago Bridge & Iron Co., Ltd., Bridgeburg, Ont.
The Canadian Des Moines Steel Co., Ltd., Chatham, Ont.
*Canadian Ingersoll Rand Co., Ltd., Sherbrooke, Que.
*Hamilton Bridge Works Co., Ltd., Hamilton, Ont.
*MacKinnon Steel Co., Limited, Sherbrooke, P.Q.
*Toronto Iron Works, Ltd., Toronto

STEEL RODS
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
*Algoma Steel Corporation.

STEEL SASH
*Canadian Metal Window & Steel Products, Limited, Toronto.
*Dennis Wire & Iron Works Co., London, Ont.
*The A. B. Ormsby Co., Ltd., Toronto, Ont.
*Trussed Concrete Steel Company of Canada, Ltd., Walkerville, Ont.

STEEL SHELVING
*Dennis Wire & Iron Works Co., London, Ont.

STEEL WIRE RODS
*The Steel Co. of Canada, Ltd., Hamilton, Ont.

STELLITE
*Deloro Smelting & Refining Co., Ltd., Deloro and Toronto.

STENCILS, brass
Pritchard-Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

STEREOTYPING
Central Press Agency, Toronto.

STOKERS
*Under-feed Stoker Co. of Canada, Ltd., Toronto, Ont.

STOOLS, steel factory
*Steel Trough & Machine Co., Ltd., Tweed, Ont.

STORAGE BATTERIES
*Prest-O-Lite Company of Canada Limited, Toronto.

STORE FITTINGS
The Canadian Office & School Furniture Co., Ltd., Preston Ont.

STOVES
Smith Foundry Co., Ltd., Fredericton, N.B.

STOVES AND RANGES
*McClary Mfg. Co., London, Ont.

STRAWS, paper drinking
Fletcher Mfg. Co., Ltd., Toronto

STRUCTURAL STEEL.
*Algoma Steel Corporation.

STRUCTURAL STEEL WORK
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.
*Dominion Bridge Co., Montreal.
*Hamilton Bridge Works Co., Ltd., Hamilton, Ont.
*McGregor & McIntyre, Ltd., Toronto, Ont.
*MacKinnon Steel Co., Ltd., Sherbrooke, Que.
*The Canadian Bridge Co., Ltd. Walkerville, Ont.

SUIT CASES
J. Eveleigh & Co., Ltd., Montreal
*The M. Langmuir Mfg. Co., of Toronto, Ltd., Toronto, Ont.

SULPHUR BURNERS
*The Hydraulic Machinery Co. Limited, Montreal.

SUPERHEATERS, steam
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

SUPERHEATERS, STEAM (Locomotive, Marine, Stationary)
The Superheater Company, Limited, Transportation Building, Montreal, Quebec.

SUPPLY DEALERS
*The Foundation Co., Ltd., Montreal, Que.

SURFACERS
*Canada Machinery Corporation Ltd., Galt, Ont.
*P. B. Yates Machine Co., Ltd. Hamilton, Ont.

SWITCHES, railway
Canadian Ramapo Iron Works Ltd., Niagara Falls, Ont.

SWITCHES AND FROGS
*Canadian Steel Foundries, Ltd., Montreal, Que.

SWITCH STANDS
Canadian Ramapo Iron Works, Ltd., Niagara Falls, Ont.

TABLE COVERS, chenille
Hamilton Cotton Co., Hamilton, Ont.

TANKS
*Canadian Chicago Bridge & Iron Company, Ltd., Bridgeburg, Ont
*Canadian Des Moines Steel Co., Limited, Chatham.
*Hamilton Bridge Works Co., Ltd., Hamilton, Ont.
*E. Leonard & Sons, Ltd., London, Ont.
*MacKinnon Steel Co., Ltd., Sherbrooke, Que.
*Maritime Bridge Co., Ltd., New Glasgow, N.S.
*Ontario Wind Engine & Pump Co., Ltd., Toronto, Ont.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*The Goold Shapley & Muir Co., Limited, Brantford, Ont.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.
*Toronto Iron Works, Ltd., Toronto.
Wm. H. White, Ville St. Pierre, Montreal, Que.

TANKS, elevated steel
*Canadian Chicago Bridge & Iron Co., Ltd., Bridgeburg, Ont.
*Canadian Des Moines Steel Co Limited, Chatham.

TANKS, steel storage
The Canadian Des Moines Steel Co., Ltd., Chatham, Ont.
*Canadian Ingersoll Rand Co., Ltd., Sherbrooke, Que.
*Canadian Chicago Bridge & Iron Co., Ltd., Bridgeburg, Ont.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*MacKinnon Steel Co., Ltd., Sherbrooke, Que.
*Steel Trough & Machine Co., Ltd., Tweed, Ont.

TANNERS' OILS & GREASES
Salem Oil & Grease Co. of Canada, Limited, Farnham, Que.

TANNERS' SUPPLIES
*McClary Mfg. Co., London, Ont.

TAPS
*Butterfield & Co., Rock Island, P.Q.
*Pratt & Whitney Co., Dundas, Ont.

TAPES, measuring
The Lufkin Rule Co. of Canada, Ltd., Windsor, Ont.

TELEPHONE ACCESSORIES
*Northern Electric Co., Ltd., Montreal, Que.

TERMINALS, electric cable
*Standard Underground Cable Co of Canada, Ltd., Hamilton, Ont.

TERRA COTTA, architectural
Toronto Plate Glass Importing Co., Ltd., Toronto, Ont.

TEXTILE SUPPLIES (shuttles, bobbins, spools and picker sticks)
The Lachute Shuttle Co., Ltd., Lachute Mills, P.Q.

TIE TAMPERS
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.

TILING, rubber
*Gutta Percha & Rubber Ltd., Toronto, Ont.

TIME RECORDERS
*International Business Machines Co., Ltd., Toronto, Ont.

TINWARE, lithographed
*MacDonald Mfg. Co., Ltd., Toronto, Ont.

TIRES, bicycle, auto, carriage, truck, motorcycle.
*Gutta Percha & Rubber Ltd., Toronto, Ont.

TOOLS, pneumatic
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.

TOOLS, track
B. J. Coghlin Co., Ltd., Hamilton.

TOYS AND GAMES.
A. C. Gilbert-Menzies Co., Ltd., Toronto, Ont.

TRADE MARKS AND PATENT INVESTIGATIONS
Harold C. Shipman & Co., Ottawa, Ont.

TRADE MARKS AND DESIGNS
*Ridout & Maybee, Toronto, Ont.

TRAFFIC SERVICES
Guy Tombs Limited, Montreal, Que.

TRANSFERS, DECALCOMANIA
Canada Decalcomania Co., Ltd., Toronto.

TRANSFORMERS
*The Canadian Crocker-Wheeler Co., Ltd., St. Catharines, Ont.

TRANSLATIONS INTO FRENCH
Raoul Renault, Quebec City.

TRANSMISSION MACHINERY
*Bond Engineering Works., Limited, Toronto.
*Canadian Link Belt Co., Toronto.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.

TRAPS
*C. A. Dunham Co., Ltd., Toronto.

TROLLEYS
*Richard-Wilcox Canadian Co., Ltd., London, Ont.
*Northern Crane Works, Ltd., Walkerville, Ont.

TRUCKS
*Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
*Northern Crane Works, Ltd., Walkerville, Ont.

TRUCKS, brick, tile and lumber
*Waterous Engine Works Co., Ltd., Brantford, Ont.

TRUCKS, motor
Mapleleaf Manufacturing Comp- Ltd., Montreal, Que.
*National Steel Car Co., Ltd., Hamilton, Ont.

TRUCKS FOR OFFICE AND VAULT USE
*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.

TRUNKS
Lamontagne, Ltd., Montreal, Que.
J. Eveleigh & Co., Ltd., Montreal.
*The M. Langmuir Mfg. Co., of Toronto, Ltd., Toronto.

TUBES, ice cream
Fletcher Mfg. Co., Ltd., Toronto.

TUBING, brass and copper
*Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.
Canadian Seamless Wire Co., Toronto, Ont.
*Copper Products, Ltd., Montreal, Que.

TUBING, gold and silver
Canadian Seamless Wire Co., Toronto, Ont.

TUMBLERS, foundry
*Northern Crane Works, Ltd., Walkerville, Ont.
*Smart-Turner Machine Co., Ltd., Hamilton, Ont.

TURBINES, hydraulic
*Dominion Engineering Works, Limited, Montreal, Que.

TURBINES, steam
*The Canadian Crocker-Wheeler Co., Ltd., St. Catharines.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

TURBINE PUMPS
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

TWEEDS
Rosamond Woollen Co., Almonte, Ont.

TWINES
*Doon Twines, Limited, Kitchener, Ontario.
*Shurly & Derrett, Ltd., Toronto.

TWINES, binder
Brantford Cordage Co., Ltd., Brantford, Ont.

TWINES, cotton
Hamilton Cotton Co., Hamilton, Ont.

TWIST DRILLS
*John Morrow Screw & Nut Co., Ltd., Ingersoll.
*Pratt & Whitney Co. of Canada, Dundas, Ont.

UNDERWEAR
Galt Knitting Co., Ltd., Galt, Ont.

UNIONS
*Dart Union Co., Ltd., Toronto.

UPHOLSTERED FURNITURE, leather and tapestries
Imperial Rattan Co., Ltd.

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VACUUM PUMPS
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

VALVES
*Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
*Kerr Engine Co., Ltd., Walkerville.
*Jenkins Bros., Ltd., Montreal, Que.

VALVES, for steam and water
*Jenkins Bros., Ltd., Montreal.
James Morrison Brass Mfg. Co., Ltd., Toronto, Ont.

VALVES, REDUCING
*Mason Regulator & Engineering Co., Ltd., Montreal, Que.

VARNISH
Berry Brothers, Inc., Walkerville, Ont.

VAULT FITTINGS, steel
*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.

VAULTS AND VAULT DOORS
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

VENTILATORS
*A. B. Ormsby, Ltd., Toronto, Ont.
*The Pedlar People, Ltd., Oshawa, Ont.

WALLPAPERS
Staunton Limited. Toronto.

WALLBOARD, SHEATHING,
Beveridge Supply Co., Limited, Montreal, Que.

WASHERS
*The Steel Co. of Canada, Ltd., Hamilton, Ont.

WASHERS, fibre
*The Diamond State Fibre Co. of Canada, Ltd., Toronto.

WASHERS, plate or wrought
London Rolling Mill Co., Ltd., London, Ont.

WASTE BASKETS, fibre
*The Diamond State Fibre Co. of Canada, Ltd., Toronto.

WASTES, wool and cotton
Factory Waste & Metal Co., Montreal, Que.

WATERPROOF, cement coating
Benjamin Moore & Co., Ltd., Toronto, Ont.
Beveridge Supply Co., Ltd., Montreal, Que.
*The Barrett Co., Ltd., Toronto and Montreal.

WATERPROOF, caselining
Beveridge Supply Co., Limited, Montreal, Que.

WATER PAINTS
Sturgeons Limited, Toronto.

WEBBING, elastic
Hamilton Cotton Co., Hamilton, Ont.

WEBBING, non-elastic
Hamilton Cotton Co., Hamilton, Ont.

WELDING APPARATUS AND MATERIALS
*The Presto-O-Lite Co., Toronto.

WELL-DIGGING TOOLS AND MACHINERY
*Ontario Wind Engine & Pump Co., Ltd., Toronto, Ont.

WHEELS, corundum and emery
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

WELL DRILLING TOOLS AND MACHINERY
Oil Well Supply Co., Ltd., Petrolia, Ont.

WHIPS AND LASHES
Lay Whip Co., Rock Island, Que.

WHITE ARSENIC
Coniagas Reduction Co., Ltd., St. Catharines, Ont.

WHITE LEAD
*A. Ramsay & Son Co., Montreal.

WINDMILLS
*Ontario Wind Engine & Pump Co., Ltd., Toronto, Ont.

WINDOW SASH
*Trussed Concrete Steel Company of Canada, Ltd., Walkerville, Ont.

WIRE
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
*Laidlaw Bale-Tie Co., Ltd., Hamilton, Ont.
*Frost Steel & Wire Company, Limited, Hamilton, Ontario.

WIRE BALE TIES
*Frost Steel & Wire Co., Limited, Hamilton, Ontario.
*Laidlaw Bale-Tie Co., Ltd., Hamilton, Ont.

WIRE CLOTH
*Canada Wire & Iron Goods Co., Hamilton, Ont.
*B. Greening Wire Co., Limited, Hamilton, Ont.
*C. H. Johnston & Sons, Ltd., Montreal, Que.

WIRE, feeder and trolley
*Standard Underground Cable Co. of Canada, Ltd., Hamilton, Ont.

WIRE GUARDS
*Canada Wire & Iron Goods Co., Hamilton, Ont.
*B. Greening Wire Co., Limited, Hamilton, Ont.
*C. H. Johnson & Sons, Limited, Montreal, Que.

WIRE, insulated electric
*Standard Underground Cable Co of Canada, Ltd., Hamilton, Ont

WIRE ROPE
Canada Wire & Iron Goods Co., Hamilton.
*Dominion Wire Rope Co., Ltd., Montreal, Que.
*The B. Greening Wire Co., Ltd., Hamilton, Ont.

WIRE, weatherproof
*Standard Underground Cable Co of Canada, Ltd., Hamilton, Ont.

WIRE WORK
*C. H. Johnson & Sons, Limited, Montreal, Que.
*Canada Wire & Iron Goods Co., Hamilton, Ont.
*The Geo. B. Meadows, Toronto Iron & Brass Goods Works Co., Ltd., Toronto, Ont.

WOOD
Standard Fuel Co., Toronto, Ont.

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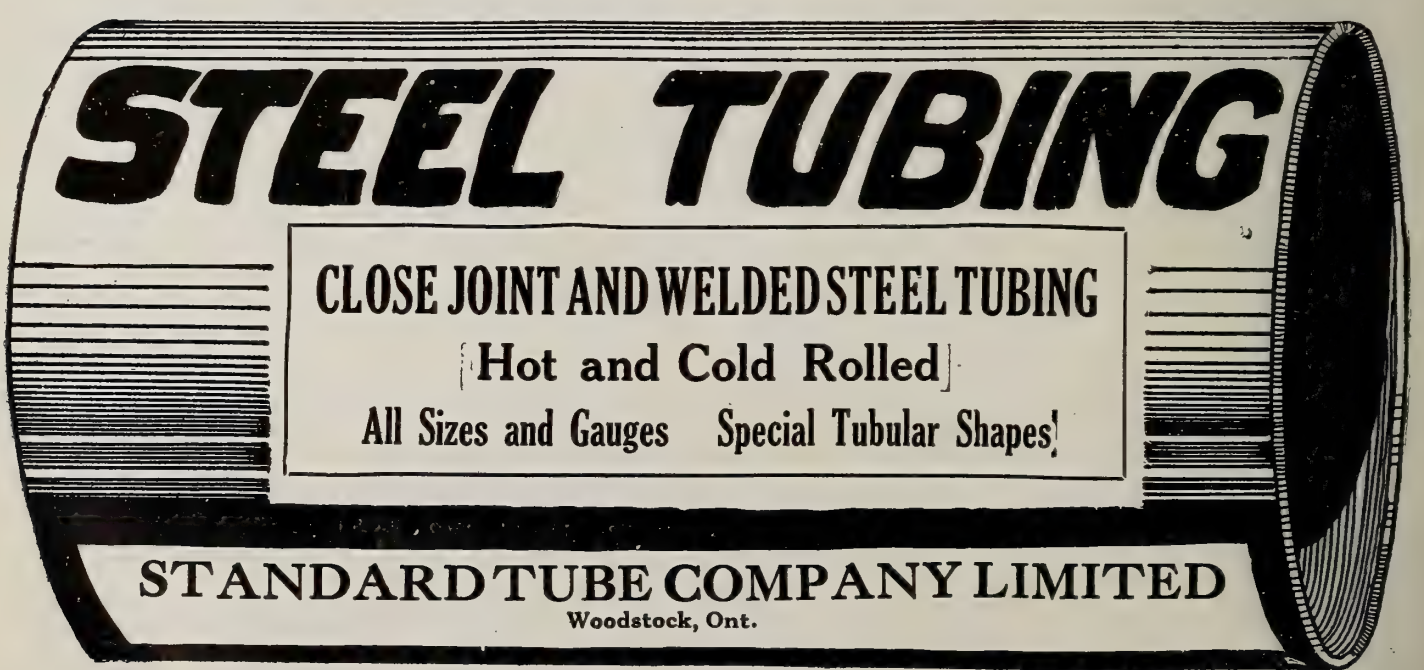
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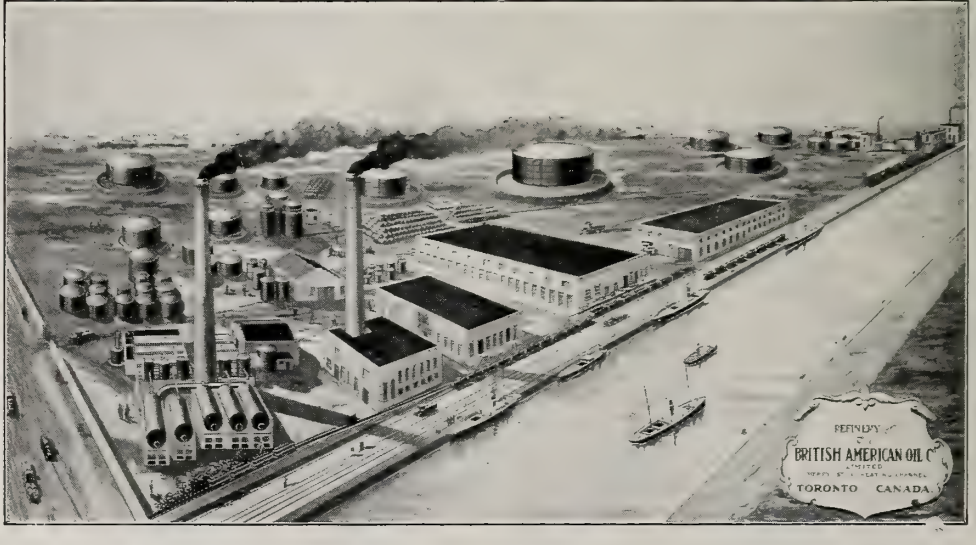
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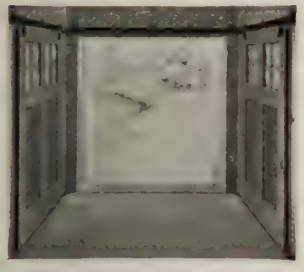


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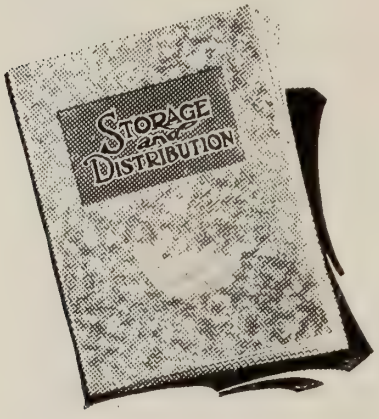
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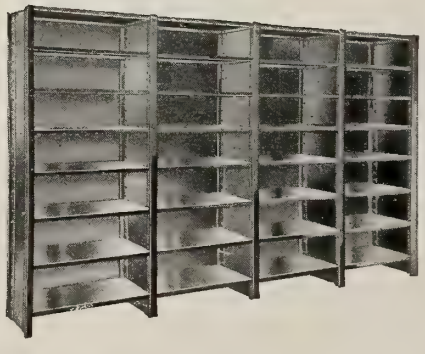
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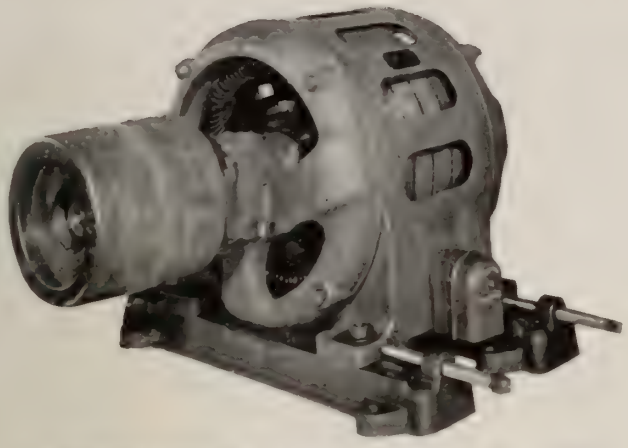
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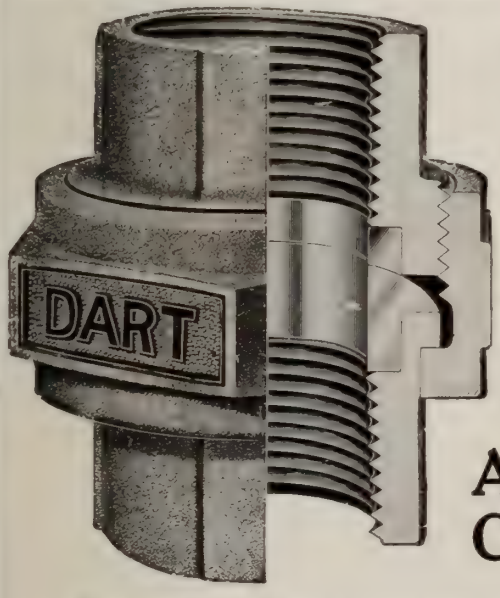
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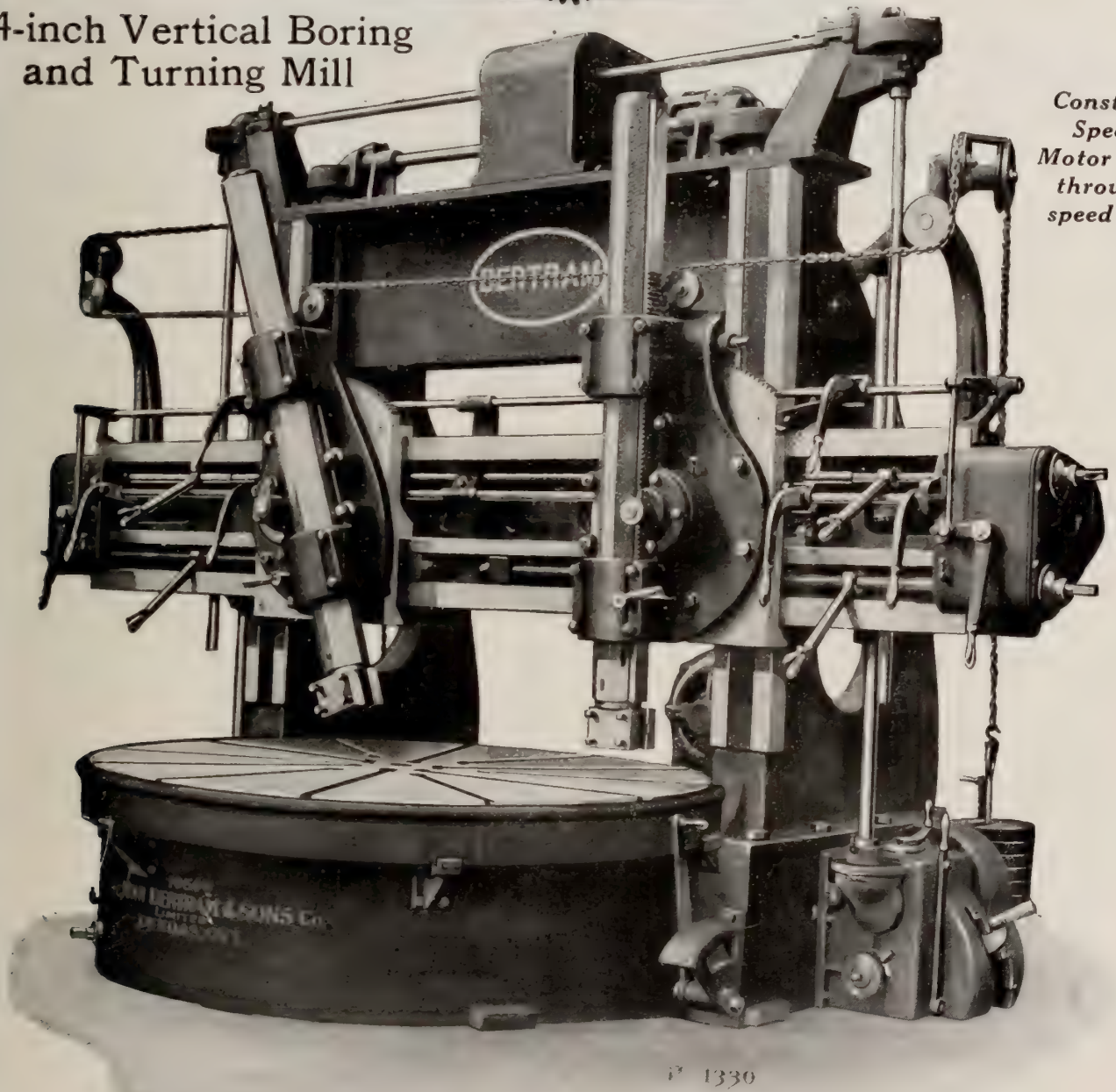
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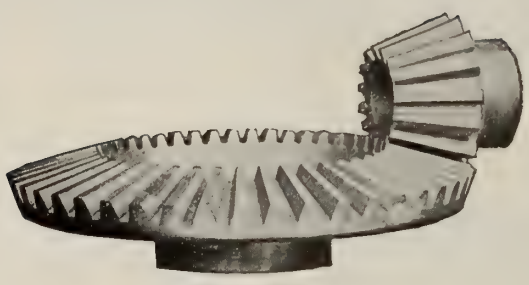
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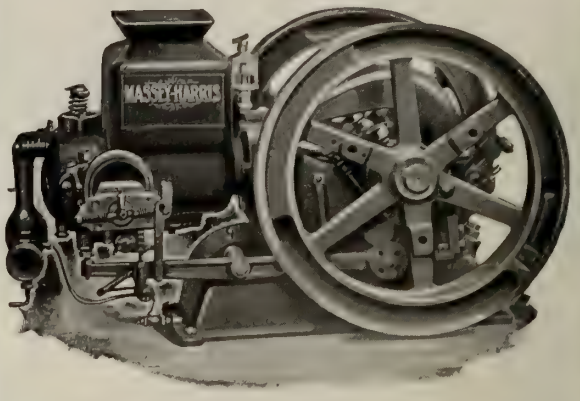
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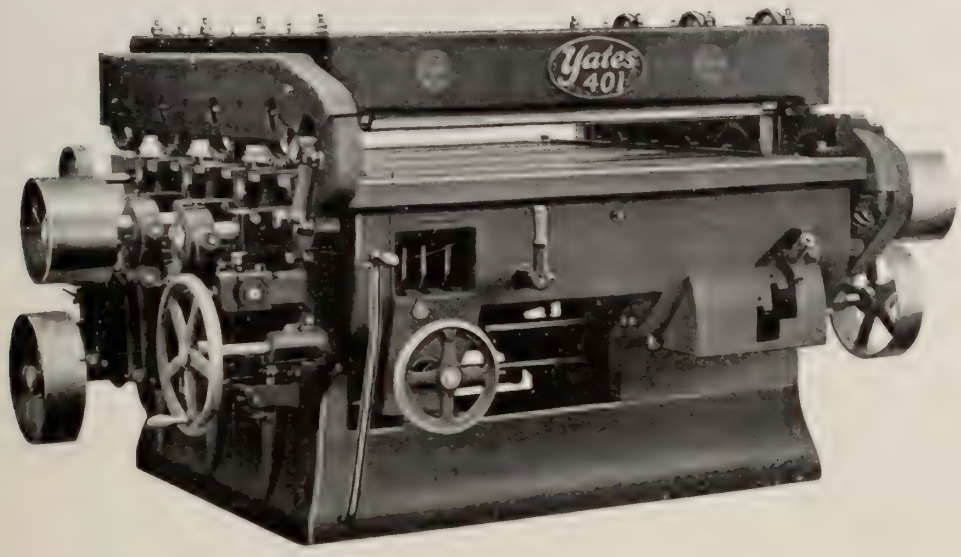
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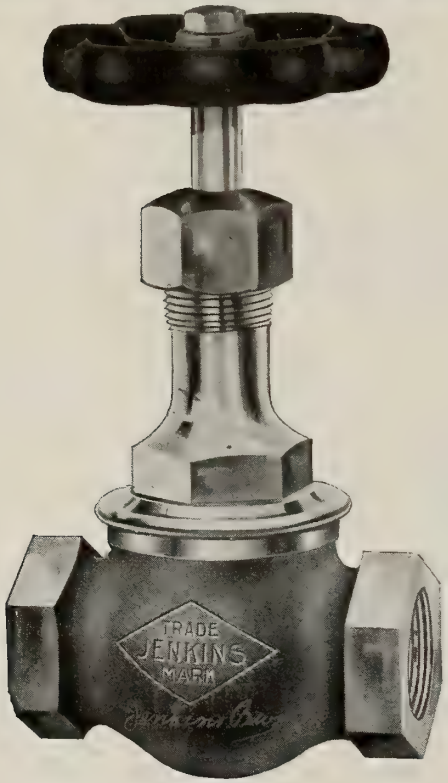


Fig. 106

The Libbey-Owens Factory at Hamilton Equipped With JENKINS VALVES

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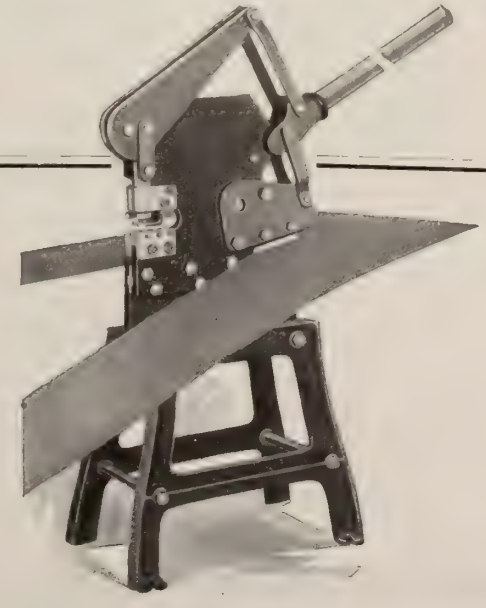
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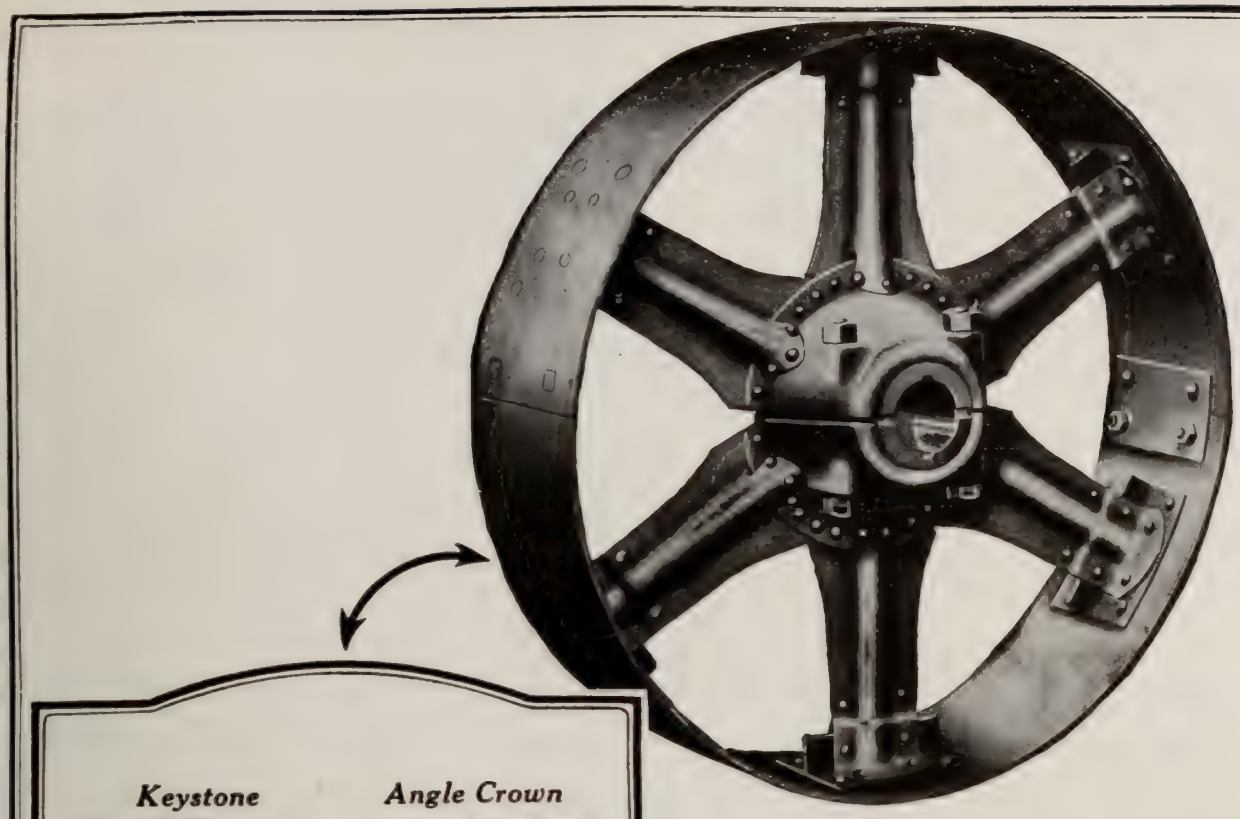
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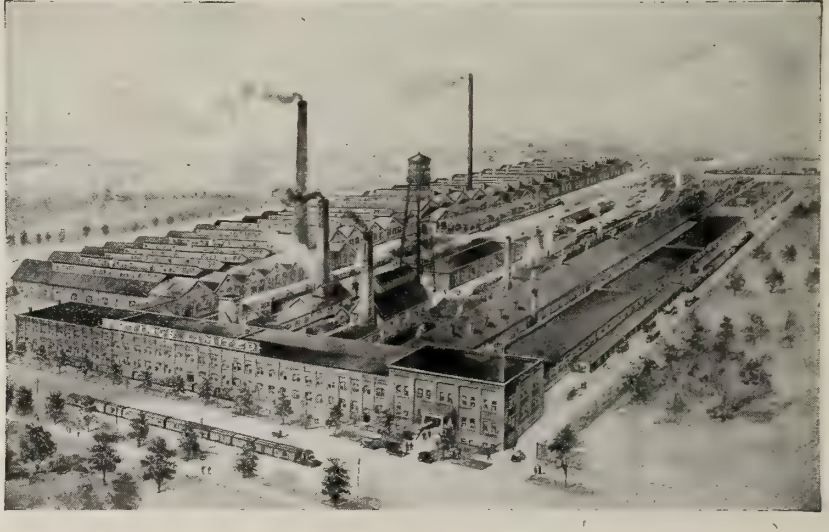
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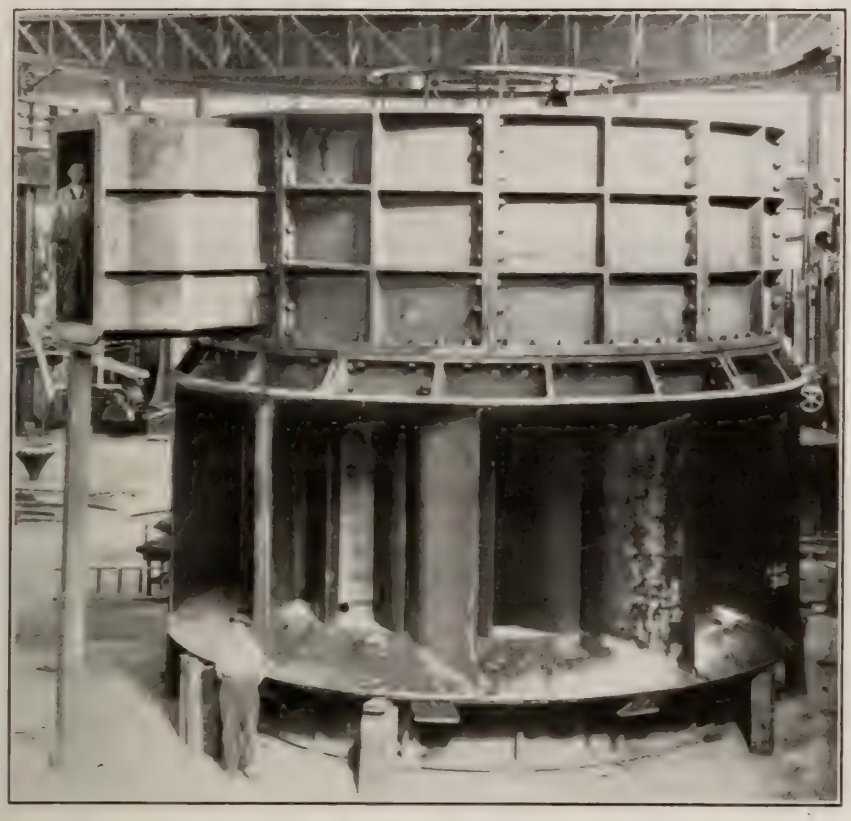
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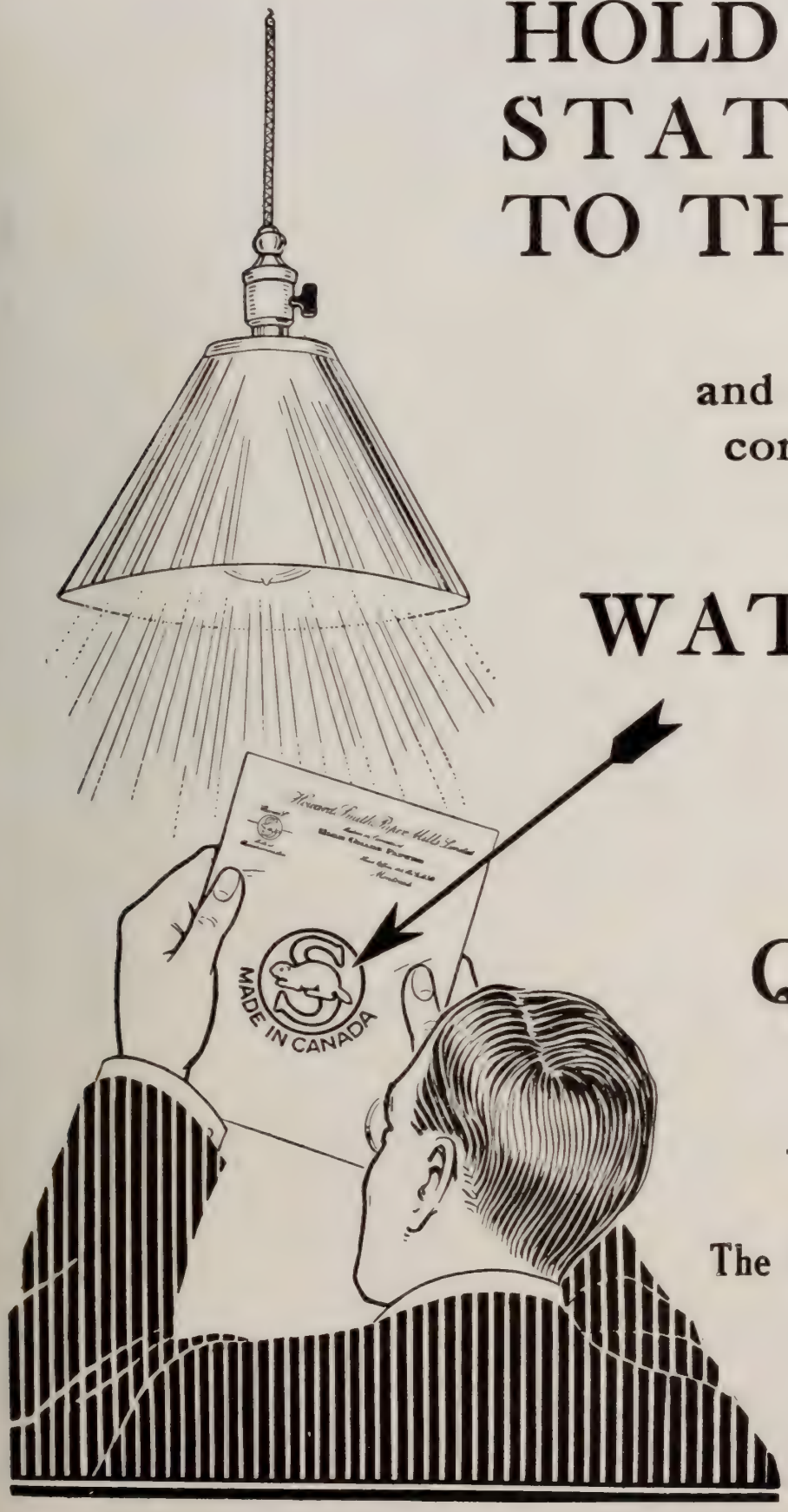
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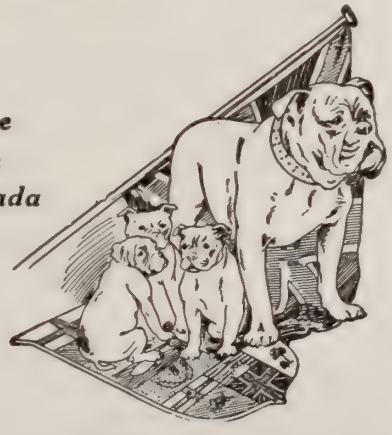
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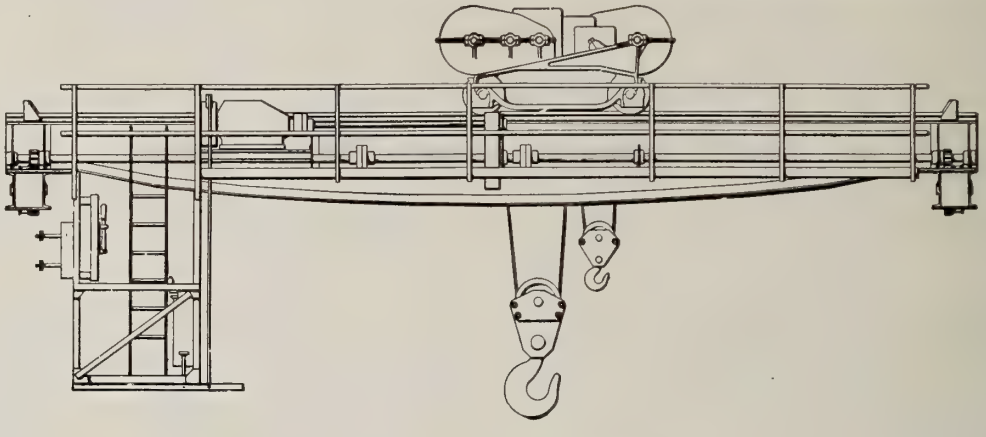
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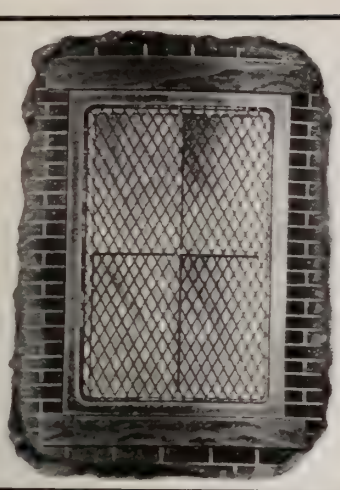
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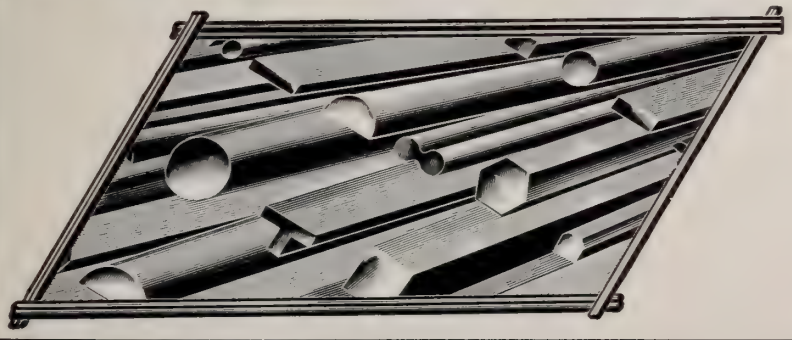
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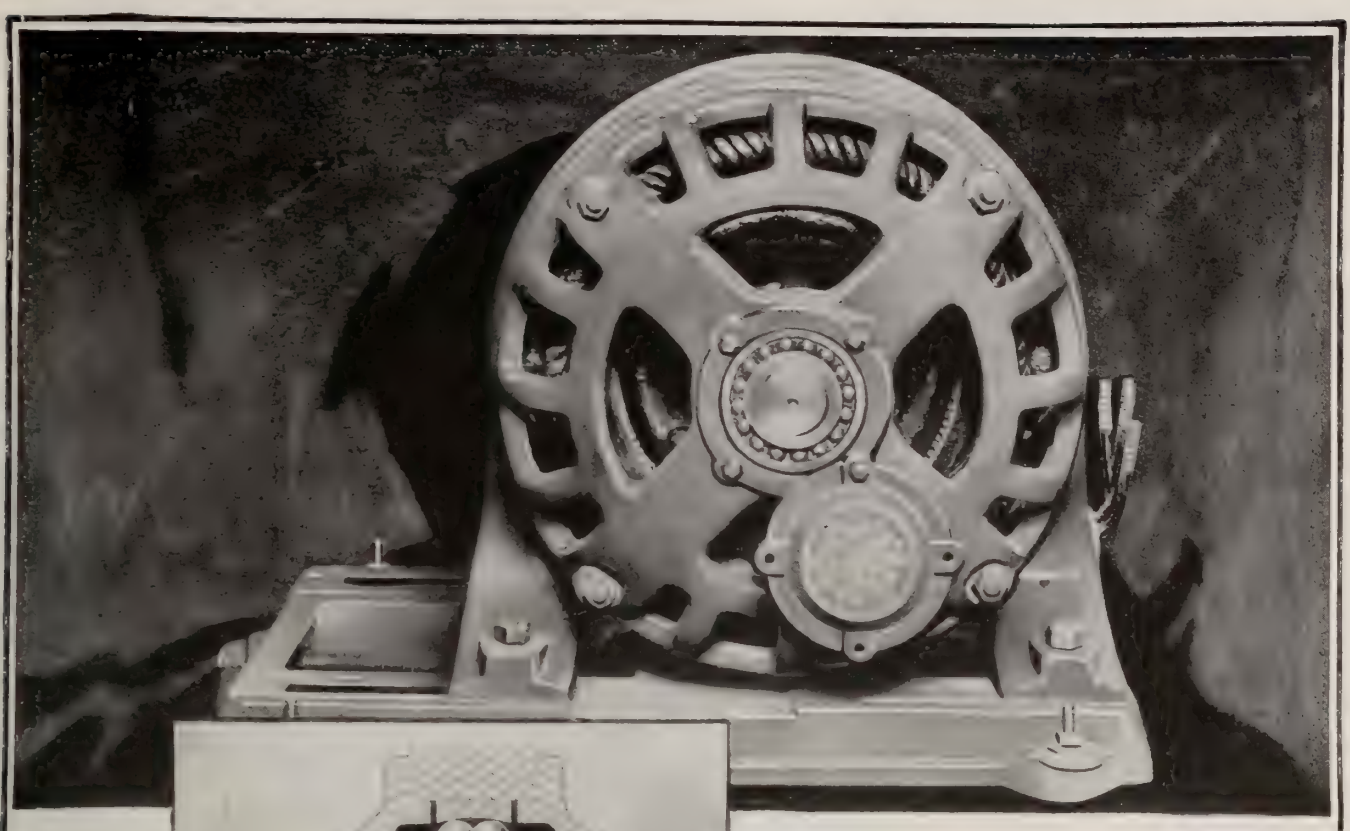


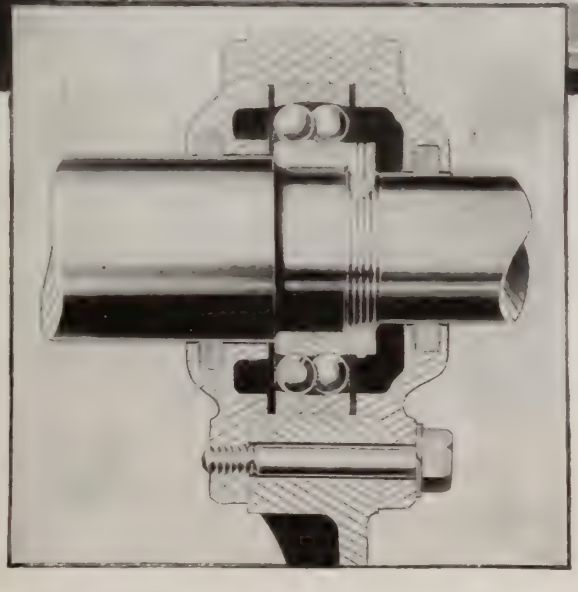
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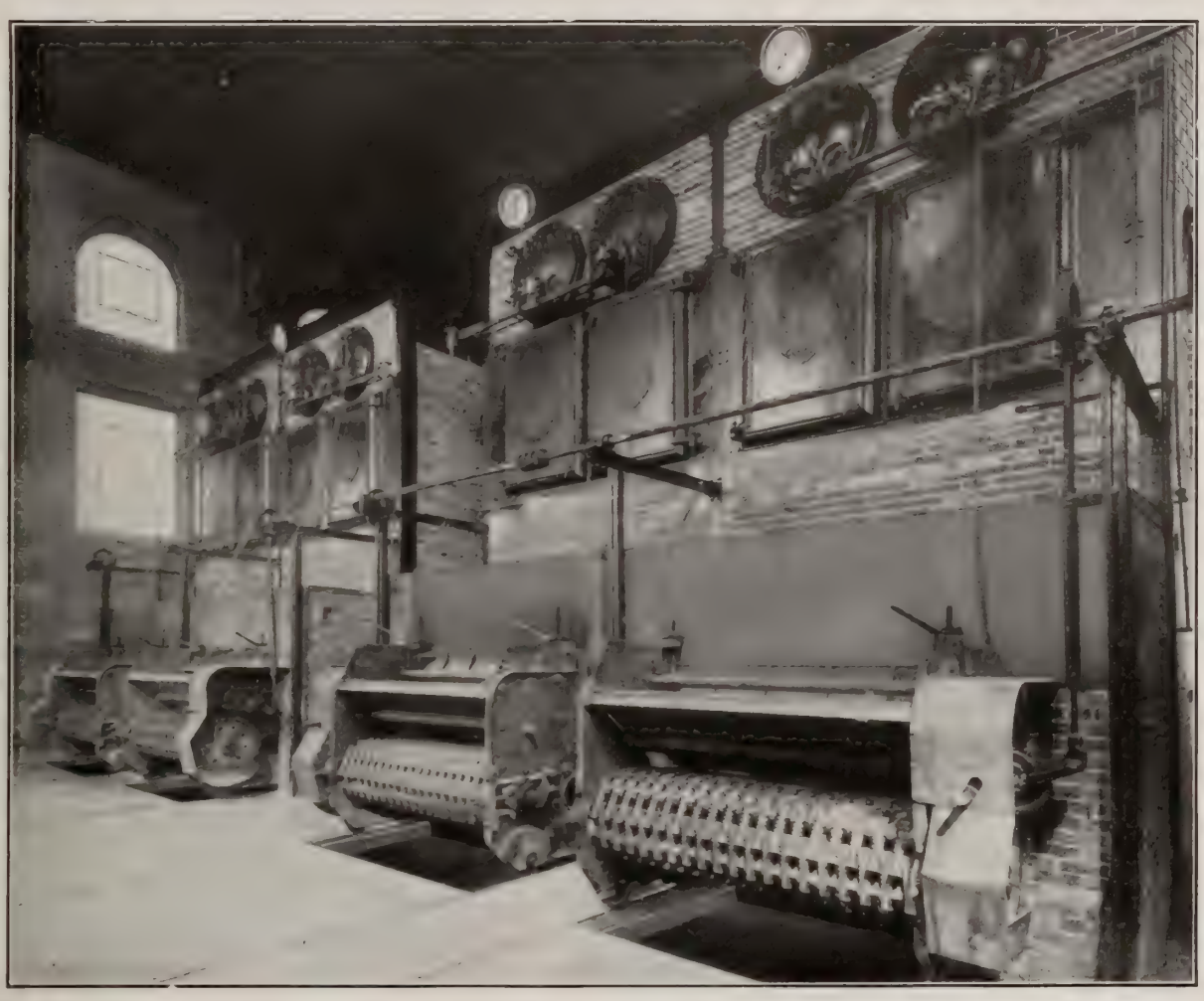
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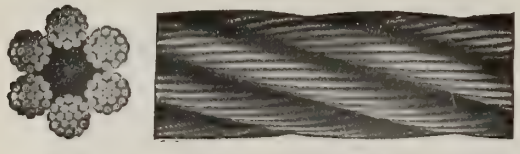
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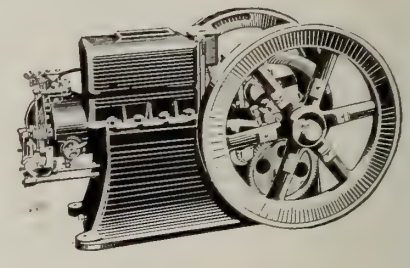
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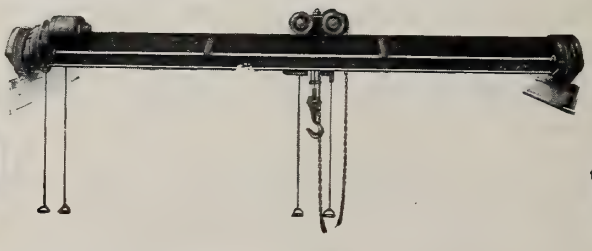
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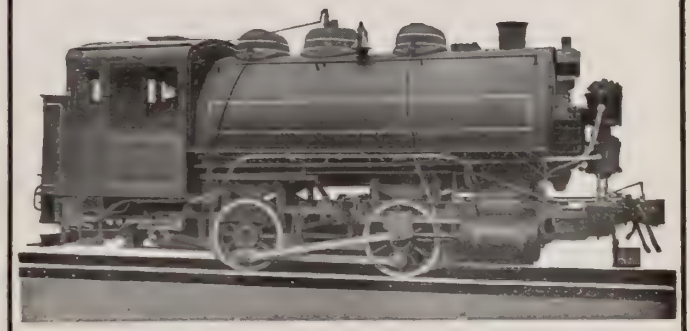
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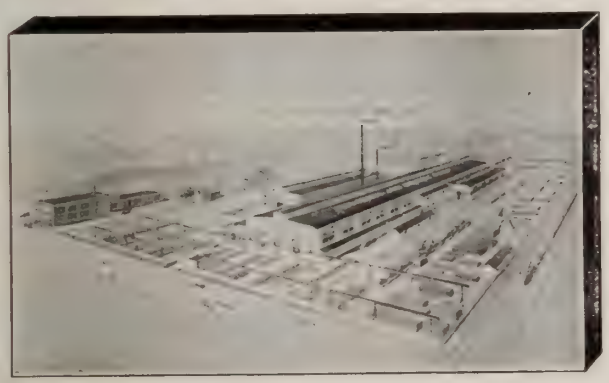
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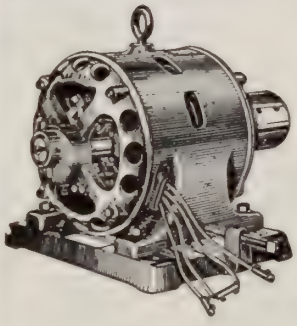
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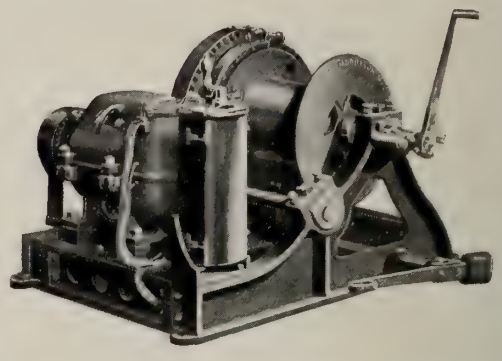
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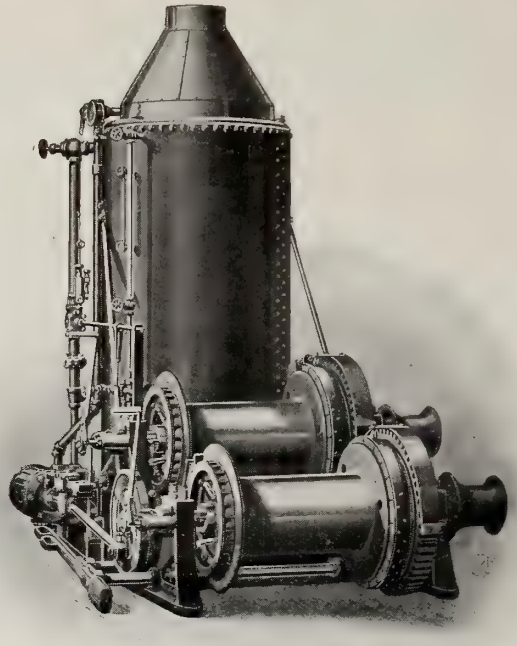
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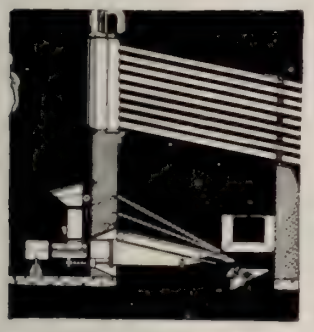
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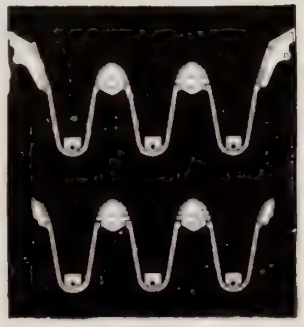
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Slight slope of Jones "A-C" retort compared with gravity feed retorts (indicated by dotted lines). Instead of gravity fuel movement, positive movement.



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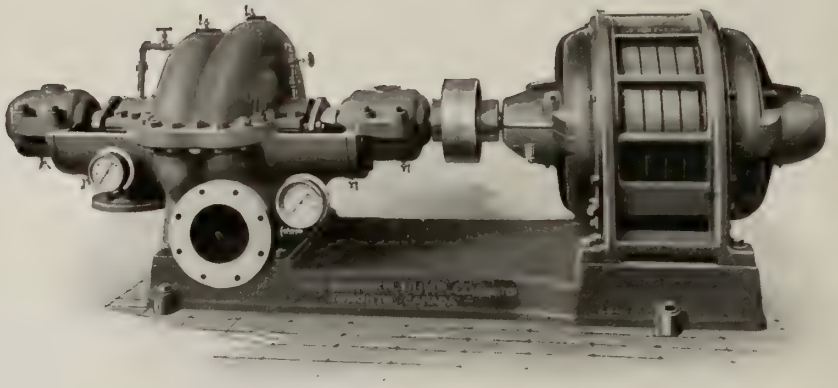
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Industrial Canada

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Editorial Comment

Industrial Power Compared.

THE enormous extent of manufacturing industry in the United States is indicated by the recently published figures of the 1920 census of manufactures, covering the year 1919. These figures are preliminary and subject to change and correction, but they may be regarded as giving a fairly close approximation to the actual total.

There were in 1919, 290,168 establishments, which gave employment to an average of 9,103,200 wage earners. The capital invested approached close to $45,000,000,000; materials used cost over $37,000,000,000 and products had a value of $62,910,202,000.

In 1919, Canada had 38,344 manufacturing establishments, employing 681,700 persons, with invested capital of $3,230,686,368 and producing goods valued at $3,520,724,039.

When the figures for the two countries are thus compared, the dominating position of the United States is made very clear. Its great and powerful industries would be in a position to swamp the smaller industries of the Dominion, were the protective principle discarded in this country.

Manufacturer Sets Good Example.

AN address on the Canadian pulp and paper industry was delivered before the Canadian Club of Winnipeg on January 10 by Mr. Percy B. Wilson, vice-president of the Spanish River Pulp and Paper Mills and the present executive head of the Canadian Pulp and Paper Association. The address was published in full by the Winnipeg newspapers and thus secured considerable publicity in Western Canada. It was, as might be expected, most comprehensive in character and it presented an array of instructive facts and figures that must have been enlightening to a large section of the population.

Mr Wilson's willingness to accept the invitation of the Canadian Club of Winnipeg and his effort to inform the members about the great industry with which he is associated are alike most commendable. It was a service on his part not only to the pulp and paper industry but to all manufacturing industry. In it, there lies a suggestion for our other industrial leaders. Heads of the various trade sections and associations might not inappropriately consider it as one of the duties of their office to hold themselves in readiness to respond to invitations to address public and semi-public gatherings on their respective industries. A great deal of information would thus be advantageously disseminated and some progress made in the direction of dispelling the mass of prejudice that has been raised against manufacturing industry.

Developing British Trade.

MR. W. C. NOXON, Agent-General of Ontario in London, has been giving readers of the Financial News some advice as to how best British firms can share in Canadian trade. He points out that, whereas ten years ago 26 per cent. of Canada's trade was with England and 59 per cent. with the United States, to-day the English percentage has shrunk to about 12 per cent. and the United States percentage has expanded to 75 per cent. Proximity has had much to do with this result, though sentiment has tended to keep up British trade at a higher level than might otherwise have been the case.

After pointing out that, in order to fall in with Canadian wishes and at the same time maintain their own profits, United States manufacturers had undertaken the establishment of branch factories in Canada, Mr. Noxon said the British firms could easily share in the process of expansion if they would only take the trouble to realize the psychology of Canadian progress and join in at the point of least resistance.

"The point you must grasp thoroughly," declared Mr. Noxon, "is that Canadian expansion of trade can come about only by increased population, or by a policy of export. The first of these factors is largely bound up with the question of emigration, and, as you know, this problem is now engaging the earnest attention of legislators of both countries. The second factor, that of export, is, perhaps, less complicated, but equally important.

"For a variety of reasons, Canada can only hope to become an export trading country in so far as pertains to things which are characteristic to the country, or

commodities which are produced in superabundance economically. Things which are characteristic to the country include lumber and the products of the same, agricultural and dairy machinery, household utilities, electrical appliances, the products of nickel and asbestos, and other similar productions. It does not seem reasonable to expect Canada to be an exporter of clothing, boots and shoes, etc., or heavy machinery.

"There are numberless opportunities in Canada to-day for British trade, and there is any amount of scope for British enterprise," concluded Mr. Noxon. "And both traders and farmers will be welcomed by us with open arms. But I am convinced that the best course to pursue for British firms, who desire to open up or to extend trade with Canada is for them to visit Canada personally more than they do. I am quite aware that the British Trade Commissioners in Canada are doing an excellent work in promoting trade between the two countries, but in business, as in everything else, it is the 'personal equation' which counts in the long run, and it is only by meeting 'man to man' with Canadian traders that your men can hope to establish really personal, and therefore lasting, links with Canadian trade interests."

What Architects Can Do.

IN an article in the Made-in-Canada movement appearing recently in the Montreal *Herald*, emphasis was laid on the part that can be played by architects in furthering the use of Canadian materials in building. This is a point well taken and it has already been dealt with at various times both in INDUSTRIAL CANADA and in bulletins issued by the Canadian Manufacturers' Association.

"A peculiarly heavy obligation rests upon architects who prepare specifications for materials and equipment," says the *Herald*.

"In some cases United States architects are employed, and these are in the habit of specifying United States goods, because they are not acquainted with the products of this country. Even in the case of architects of Canadian birth, many have had their training in the United States, and frequently, through lack of information relative to Canadian goods or lack of experience with Canadian products, they call for materials of supplies of United States production.

"In some instances, public bodies which are anxious to support the Made-in-Canada campaign to the fullest possible extent have allowed specifications to be issued in which imported articles are called for, by direct mention of the name of manufacturers abroad, with or without some qualifying clause permitting the use of some "equal" alternative. In this way the use of the imported commodities is impressed upon the mind of the contractor and he must take the full responsibility if any objections, justified or unjustified, are made to any alternative goods which he may substitute. Recently the school board of two large Canadian cities issued specifications calling for foreign-made master clocks and signal gongs as equipment for collegiate institutes. These specifications apparently were drawn up by their architects thoughtlessly or in ignorance of the fact that similar equipment, at least equal in quality to, and comparing favorably in price with, the imported equipment was made by Canadian workers, in plants in Canada which buy Canadian material and pay taxes in the Dominion.

"There is a duty also upon public bodies, private companies and individuals throughout Canada to insist that the architects who prepare specifications for them should call for Canadian products to the fullest extent consistent with the obtaining of satisfactory results at favorable prices. Responsibility also rests upon Canadian manufacturers and other producers to keep architects acquainted with their products by distribution of catalogues or otherwise."

No Uncertainty about the Tariff.

THERE is at least one important section of the Canadian agricultural community which labors under no misapprehension as to the value of the protective tariff and that is the British Columbia Fruit Growers' Association. No uncertainty marked the speeches at the recent annual convention of the organization held at Victoria and at least two resolutions were carried emphasizing the views of the Association on the tariff question.

In his presidential address, Mr. C. E. Barnes declared that whatever individual views might be held on the question of the protective tariff, there was no escaping the fact that the lowering of the tariff on fruit was full of possibilities of inconceivable disaster to the British Columbia fruit-growing industry Mr. Barnes also spoke strongly in favor of the anti-dumping clause of the present act, declaring that its enforcement had prevented the utter demoralization of an overstocked market by the importation of foreign fruits at prices less than the cost of production in Canada.

Resolutions were passed asserting the dependence of the fruit growers on the maintenance of at least as much tariff protection as at present enjoyed and the vital importance of a strict enforcement of the present provisions to prevent dumping; and providing that steps be taken to impress upon the Dominion Government the great need and importance of adequate protection.

Trade Outlook in the United States.

IN the purchase and consumption during 1921 of large accumulated stocks of goods, the National Bank of Commerce in New York finds clear reason for confidence in the course of business during 1922. Future needs, it believes, must now be supplied primarily from current production and this explains recent expansion in manufactures and greater business activity.

"The general tone of business during the first two weeks of January has been encouraging," declares the Bank's market letter of January 20. "The total physical volume of retail trade is good. Sales in agricultural districts continue slower than in cities, with trade in the East and Northeast and in southern California cities better than in the remainder of the country. Necessities are selling much better than are luxuries, and this was characteristic

of the Christmas trade. Although it is generally recognized that buyers in all lines will wisely continue to be cautious as to future commitments, it seems probable that there will be a moderately well-sustained distribution of goods into wholesale as well as into retail channels.

"Unemployment is unquestionably wide-spread, but probably its extent has been somewhat over-estimated. Special measures undertaken to lessen it, particularly public works, are doing much to alleviate its worst features. The major part of the productive energy of the country is absorbed in clothing, feeding and sheltering the population. Farmers certainly will not buy heavily, but they must have such foodstuffs as are not produced on farms, as well as necessary clothing. They must buy some farm implements, for even with the more careful repairing which is increasingly practised, a certain proportion of farm machinery steadily becomes unusable. They will buy some fertilizer, and they will buy articles of convenience and even of luxury to some extent.

"Railroads have made notable gains in economy of operation, and improved credit conditions have definitely bettered their outlook, although traffic is at present disappointing in volume. The heavy decline in tonnage, serious as it has been, has primarily been the result of lessened shipments of coal, iron ore and similar heavy commodities. Reasonable buying of rails, cars, locomotives and other equipment may be expected during the current year."

The finding of the National Bank of Commerce is equally applicable to Canada. We have just as good ground for confidence in the Dominion as they have in the United States.

Industrial Census of Maritimes.

AS 1919 was a year of great industrial activity, with plants operating to capacity and many new industries being established, it is not surprising to find that the preliminary industrial census of the Maritime Provinces for 1919, recently issued by the Dominion Bureau of Statistics, should show progress. The comparative figures for the three years, 1917, 1918 and 1919 are as follows:—

		1917	1918	1919
Establishments	No.	1,104	3,973	4,225
Capital invested		$204,713,399	201,620,190	221,740,148
Employees on Salary	No.	5,324	4,163	4,584
Salaries		$ 5,329,480	5,167,271	6,160,932
Employees on Wages	No.	49,360	51,749	49,465
Wages		$ 32,883,277	35,121,162	38,292,432
Cost of materials		$146,472,306	131,602,097	133,669,232
Value of products		$244,304,401	234,436,837	246,081,885

As regards the provinces individually, it may be noted that all three report increases in the number of establishments but in point of capital invested, while New Brunswick enjoyed an increase from $65,000,000 in 1917 to nearly $90,000,000 in 1919, Nova Scotia dropped from $136,500,000 to $132,000,000. Likewise in the number of employees on wages, New Brunswick showed an increase from 18,668 to 22,064 but Nova Scotia a decline from 28,946 to 25,880. The value of the products of New Brunswick industry jumped from $62,000,000 to $100,000,000; that of the products of Nova Scotia industry declined from $176,000,000 to $139,000,000,

Lumbering continues to hold front rank among the industries of New Brunswick and that by a wide margin The 1919 census shows 249 establishments, with capital of $31,816,125, 8624 employees and $26,713,403 products. Second place is taken by the cotton textile industry, its 3 mills giving employment to 1717 persons and yielding products valued at $6,736,974. Third in importance comes the wood pulp industry, with five mills, a capital of nearly $12,000,000, 1241 employees and products valued at $5,874,318.

In Nova Scotia, as might be anticipated, rolling mills and steel furnaces are the leading industry. There are 4 establishments, with capital invested of over $20,000,000; employees, 2261 in number and products valued at $31,362,000. In second place comes the lumbering industry, having 486 establishments, 3423 employees, $6,372,121 capital and $8,331,824 products. The fish preserving industry is a close third, with 264 establishments, 1626 employees, $3,828,517 capital and $7,877,785 products.

Growth of Industry in the West.

THE rapid growth of industry in the three prairie provinces and British Columbia during the past few years is confirmed by the figures recently issued by the Dominion Bureau of Statistics in connection with the preliminary survey of the manufacturing industries of Western Canada for 1919. Take, for example the province of British Columbia and consider the progress made between 1915 and 1919.

		1915	1917	1919
Establishments	No.	1,007	1,772	2,064
Capital invested		$158,636,983	221,436,100	268,119,281
Employees	No.	21,054	40,098	49,667
Salaries and Wages		$ 11,567,751	38,269,366	60,964,272
Cost of material		$ 12,284,883	92,489,277	99,944,539
Value of products		$ 73,624,431	171,425,616	243,060,276

Similarly combining the figures for the three prairie provinces for the same interval, the following result is obtained.

		1915	1917	1919
Establishments	No.	1,881	4,082	4,535
Capital invested		$151,874,530	197,475,107	214,078,920
Employees	No.	29,544	42,101	49,827
Salaries and Wages		$ 21,395,353	36,993,503	57,611,191
Cost of materials		$ 67,313,369	140,478,155	183,234,988
Value of products		$106,349,591	235,132,050	307,611,859

British Columbia's must important industry is, of course, lumbering, with shipbuilding (in 1919) second, fish preserving third and smelting fourth. There were 258 establishments devoted to the production of log products, representing a capital investment of close to $60,000,000; over 17,000 persons were employed, drawing in salaries and wages, $20,268,591; value of product was $60,444,053. In the shipbuilding industry there were 14 establishments, with capital invested of $6,541,003, employees 8,102 and value of product, $34,477,510. 104 establishments were engaged in preserving fish the product being valued at $18,629,627. There were three smelters, with invested capital of $29,120,459 and producing, $13,930,515.

Turning to the prairie provinces, it is not unnatural to find that slaughtering and meat packing, flour and grist mill products and butter and cheese are in the lead. In Alberta, there were 7 packing houses, representing an investment of $17,598,091, and producing $29,157,117. and 49 flour and grist mills, representing an investment of $8,401,666 and producing $21,297,786. In Saskatchewan, flour and grist mills lead with 47 establishments, $4,888,-

051 capital and $17,673,125 products. In Manitoba, slaughtering and meat packing had 7 plants, an investment of $9,059,507 and products of $27,289,172 while there were 38 flour and grist mills, with capital of $8,711,-329, producing $26,764,437.

A Case of Double Taxation.

A YEAR ago the Ontario Legislature saw fit to accede to the demands which had been made on its members for years back by municipal authorities and pass an amendment to the Assessment Act cancelling the exemption for income tax purposes allowed hitherto on dividends of industrial corporations, which themselves were subject to assessment. This constituted a clear case of double taxation and its effect on the industrial progress of the province must prove detrimental.

It is pointed out that the earnings of probably ninety per cent. of the manufacturing businesses which have developed in Toronto within a period of twenty years or more have been built up as a result of a re-investment of the major part of the dividends for the purpose of perfecting and enlarging the plants, thus creating greater opportunity for employment.

The business tax that since 1905 has been levied against mercantile and manufacturing concerns replaced the old tax on personalty and was designed to afford an equitable substitute easily computed for what in the case of the individual would be an income tax. The effect of the amendment of the Assessment Act of 1920 is that manufacturing concerns are still required to pay as a substitute for this tax, the local rate of 60% of the assessed value of the premises they occupy but in addition to this, the act now exposes to the full operation of the municipal income tax any dividends that a shareholder may receive from a corporation that has already paid the business tax.

An individual or firm carrying on an industrial or commercial business is charged only the local rate on 60% of the assessed value of the premises it occupies but immediately such business is converted into an incorporated company, it is called upon to pay the local rate on 60% of the assessed value of the premises, and in addition, municipal income tax is charged on the same profits when distributed as dividends amongst the shareholders who furnish the money to carry on the business.

The federal income tax law guards against double taxation by assessing the normal tax only against a corporation, but exempts the individual shareholder to the extent of the normal tax already paid on dividends received by him, though assessing him for surtaxes in so far as his total income may make him liable thereto, which is clearly the equitable method.

In connection with dividends, which may be paid by a subsidary company to the parent company, and these dividends assessed against the parent company, it is clearly a case of double taxation to charge the subsidiary company again with the municipal income tax. The argument advanced in support of this would, of course, be included in the expense of such company before any dividends would be declared and paid to the shareholders of the parent company, but such payment goes to reduce the dividend coming to the shareholder in the subsidiary company, who is asked to pay the tax again and so involves the principle of double taxation.

The Vast Burden of National Debts.

COMPREHENSIVE information as to the national debts of the allied nations and their indebtedness one to another are furnished in a report recently issued by the United States Senate in connection with the bill authorizing the creation of a commission to deal with the refunding of obligations of foreign governments.

The national debts, population and indebtedness per capita of the United Kingdom, France, United States and Italy are given as follows,—

	POPULATION	DEBT—	PER CAPITA
United Kingdom	46,089,000	$37,910,000,000	$ 822.54
France	41,476,000	51,000,000,000	1,229.62
United States	105,683,000	23,922,000,000	226.35
Italy	36,740,000	18,650,000,000	507.66

France is credited with having loaned $2,717,888,500 to foreign governments, including $1,111,000,000 to Russia and $584,300,000 to Belgium. In these debts no interest rate has been agreed upon and no interest is being paid.

Great Britain, up to March 31, 1921, had loaned $9,465,336,000 to allies and Dominions, of which $2,728,-404 was to Russia, $2,707,020,000 to France and $2,317,-248,000 to Italy.

The debts owing by Great Britain, France, Italy and Belguim to the United States are given as follows:—

	PRINCIPAL	INTEREST	TOTAL
Great Britain	$4,166,318,358	$509,173,742	$4,675,492,101
France	3,358,104,083	358,410,444	3,716,514,527
Italy	1,648,034,050	202,279,732	1,850,313,782
Belgium	377,564,298	42,699,698	420,263,997
All others	600,380,514	66,316,307	666,696,822

The United States Treasury holds $10,150,401,305 of obligations of foreign governments. Of this amount $9,434,774,829 is held for advances made under the various Liberty bond acts; $574,673,710 was received from the Secretary of War and from the Secretary of the Navy on account of sales of surplus war materials; $84,093,963 was received from the American Relief Administration and $56,858,802 was held by the United States Grain Corporation. The interest accrued and unpaid up to and including the last interest period upon these obligations amounted to $1,178,879,925 and the amount of interest heretofore paid was $478,863,632.

The proposed Foreign Debt Refunding Bill of the United States provides for the creation of a commission, which is empowered to take steps to arrange for the refunding of these debts.

B. J. McCormick, Industrial Commissioner of Welland, has collated the views of a number of Canadian organizations on the subject of buying Canadian-made goods and has published them in a small pamphlet. He quotes President Harding,—"We cannot sell where we do not buy," and makes Johnnie Canuck reply,—"We will not buy where we cannot sell."

The Third International Labor Conference

A Summary of the Proceedings at Geneva with Comments on the Methods and Achievements of the Conference

By E. Blake Robertson

In the accompanying illuminating article, which was prepared specially for the information of members of the Canadian Manufacturers' Association, by Mr. Robertson, who acted during the Conference as advisor to Mr. S. R. Parsons, the representative of Canadian employers, a comprehensive account of the proceedings of the Conference is supplied. While necessarily lengthy, we hope that this will not deter readers of INDUSTRIAL CANADA *from giving to the report their most careful attention. Its perusal will amply repay the effort.*

The Editor.

PART XIII. of the Peace Treaty of Versailles provided for the organization of an International Labor Office, and for yearly conferences to deal with labor matters. Each country belonging to the organization is entitled to send to the Conferences two Government delegates and one delegate each, representing respectively the employers and work-people, in addition to advisors which for each group shall not exceed two in number for each item on the agenda.

Under this provision of the Peace Treaty the Third International Labor Conference opened at Geneva on October 25th, 1921, the Government of Canada being represented by Mr. Gerald H. Brown, Assistant Deputy Minister of Labor, and Colonel J. Obed Smith, Assistant Superintendent of Emigration for Canada in London, England, assisted by Hon. Thomas H. Johnson, Attorney General of Manitoba, Hon. Walter Rollo, Minister of Labor for Ontario, Hon. A. Galipeault, Minister of Public Works and Labor for Quebec, and Mr. Roy, an official of the Quebec Government acting as advisors. The work-people's delegate was Mr. Tom Moore, President of the Trades and Labor Congress of Canada, with Mr. Arthur Martel, Vice-President of the same organization acting as advisor. The Employers' delegate was Mr. S. R. Parsons, ex-President of the C. M. A., with Mr. E. Blake Robertson acting as his advisor.

At its opening session, Viscount Burnham was elected President and acted in that capacity at all sittings of the plenary Conference.

Countries Represented

Of the 54 countries entitled to be present, 25 European and 14 non-European were represented. Argentine, New Zealand, Costa Rica, Ecuador, Haiti, Hedjaz, Honduras, Liberia, Lithuania, Nicaragua, Panama, Paraguay, Peru, Persia and San Salvador sent no representatives. Government delegates only were present from Albania, Bolivia, Brazil, Bulgaria, Chili, China, Colombia, Cuba, Guatemala, Portugal, Roumania, Siam, Uruguay and Venezuela, while Government, workers' and employers' delegates represented Australia, Austria, Belgium, British Isles, Canada, Czecho-Slovakia, Denmark, Esthonia, Finland, France, Germany, Greece, India, Italy, Japan, Luxemburg, Latvia, Netherlands, Norway, Poland, Kingdom of the Serbs, Croats and Slovenes, South Africa, Spain, Sweden and Switzerland.

Agenda of the Conference

The agenda prepared by the governing body of the International Labor Office as provided for in the Peace Treaty and presented to the Conference covered the following:

1. Reform of constitution of the Governing Body of the International Labor Office.
2. Adaptation to agricultural labour of the Washington decisions concerning the regulation of the hours of work. (Eight hour day for farm laborers).
3. Adaptation to agricultural labor of the Washington decisions concerning:—
   (a) Measures for the prevention of or providing against unemployment;
   (b) Protection of women and children.
4. Special measures for the protection of agricultural workers:
   (a) Technical agricultural education.
   (b) Living-in conditions of agricultural workers.
   (c) Guarantee of the rights of association and combination.
   (d) Protection against accident, sickness, invalidity and old age.
5. Disinfection of wool infected with anthrax spores.
6. Prohibition of the use of white lead in painting.
7. The weekly rest day in industrial and commercial employment.
8. (a) The prohibition of the employment of any person under the age of 18 years as trimmer or stoker.
   (b) Compulsory medical examination of all children employed on board ship.

Agricultural Questions

The Government of France having made formal objection to the insertion on the agenda of agricultural questions, this subject, as provided for in the Constitution, came before the plenary Conference at the 2nd, 3rd, 4th, 5th and 6th sittings. To overrule the protest of the Government of France and thus retain the items on the agenda, a vote of two-thirds of the delegates was required. The vote on Item 2 was taken at the 4th sitting, 63 being in favor and 39 opposed to the retention. Those voting in favor being less than two-thirds, of the voting delegates, the subject was removed from the agenda. The Canadian Government delegates and the Canadian workers' delegate voted to retain Item 2 on the agenda, while the Canadian employers' delegate, believing an eight-hour day for agriculture in Canada to be an entirely ridiculous proposal, voted for its removal. The Canadian Government delegate had, before the vote, explained that:

> "The Government Delegation from Canada have no objection to the reference of Items 2, 3, and 4 to Commissions, but reserve the fullest freedom as to the position which they will take on the merits of the proposals which are involved."

At the 6th Session it was decided by a vote of 90 to 17 to retain the 3rd and by a vote of 93 to 13 to retain the 4th items on the agenda, the delegates from Canada dividing their votes as they had on Item 2.

Commission of Selection

A Commission of Selection consisting of 21 members, 17 European and 7 non-European, was appointed in the early stages of the Conference, its duties being to map out the general course of procedure, the lines of work and the subjects to come before the Conference as a whole from day to day. Three committees, each consisting of thirty persons, were appointed to investigate the different agricultural questions; there was also appointed a commission on weekly rest consisting of thirty-six members, and commissions of twenty-four members each to deal with white lead, anthrax and maritime questions. The decisions of the various commissions and the Plenary Conference can be concretely summarized by a short analysis of the seven conventions, eight recommendations and numerous resolutions adopted.

Two Maritime Conventions

A convention was carried providing that persons under the age of eighteen years shall not be employed on vessels as trimmers or stokers, such provision not to apply to young persons on training ships supervised by public authority, on vessels mainly propelled by means other than steam, nor to young persons over sixteen years of age, who after being found physically fit by medical examination, are employed on vessels whose trading is limited to the coasts of India or Japan. Where trimmers or stokers are required in a port at which none over eighteen years are available, then persons over sixteen years of age may be employed on the basis that two such young persons shall be considered as the equivalent of one man.

A second maritime convention approved by the Conference provides that the employment of persons under eighteen years of age in any capacity on any other than war vessels, shall be conditional upon the production of a medical certificate attesting fitness for such work and signed by a doctor who is approved by the competent authority, the continued employment of such persons being dependent upon the repetition of such medical examination at intervals of not more than one year.

Use of White Lead

The commission on white lead held fourteen lengthy and well attended meetings and brought in a majority report proposing regulations for the handling and using of paints, the compulsory notification and medical verification by independent medical authorities of cases of supposed lead poisoning, and such provisions for the cleanliness and possible methods of protection as were deemed likely to decrease illness and mortality. A minority report was presented which adopted in toto the regulations of the majority report but which provided in addition that at the end of three years the use in interior painting of all products containing white lead should be prohibited.

When these reports came before the Plenary Conference the French Government

delegate moved an amendment providing for the entire prohibition of the use of white lead, plumbiferous linseed oil and any other specialized product containing white lead, in work of every kind done by operative painters either in exterior or interior house painting; that employers should provide their workers with overalls for use in connection with wet scraping and wet rubbing down of white lead painting, and that employers should be responsible for seeing that such overalls are kept in good order and frequently washed. This amendment was carried by a vote of 45 for to 44 against, and after some lengthy discussion in which it became apparent that the French Government motion for total prohibition could not secure the required two-thirds majority, the suggestion of a compromise was made by the British Government delegate, and the Conference adjourned for fifteen minutes, when some of the white lead commission and others interested in the subject withdrew to one of the committee rooms and, disregarding entirely the chairman of the meeting, gathered together in a corner of the room and in a "catch as catch can" bargaining conducted in four or five languages, succeeded, by a policy of give and take, in reaching a decision acceptable to the majority of those present.



Headquarters of League of Nations at Geneva

Compromise is Adopted

The compromise provided that on or before November 19th, 1927 the use shall be prohibited of white lead and sulphate of lead and of all products containing these pigments, in the internal painting of buildings, except where, after consultation with the employers and workers organizations concerned, the competent authority considers such paints necessary for railway stations or industrial establishments; that such prohibitions shall not effect white pigments containing a maximum of 2% of lead expressed in terms of metallic lead, but that the employment of all females and of males under eighteen years of age shall be prohibited in connection with painting involving the use of white lead, sulphate of lead or other products containing such pigments, and that there shall be brought into operation not later than January 1st, 1924, regulations providing that white lead, sulphate of lead or products containing same shall not be used in painting operations except in the form of paste or paint ready for use; that measures shall be taken to prevent danger arising from the application of paint in the form of spray, and that wherever practicable, measures shall be taken to prevent danger arising from dust caused by dry rubbing down and scraping; that facilities shall be provided to enable working painters to wash during and on cessation of work; that overalls shall be worn by painters during the whole of the working period; that suitable arrangements shall be made to prevent clothing put off during working hours being soiled by painting material; that cases of lead poisoning and of suspected lead poisoning shall be notified and shall be subsequently verified by a medical man appointed by the competent authority; that such competent authority may require when necessary a medical examination of workers; that instructions with regard to special hygienic precautions to be taken in the painting trade shall be distributed to working painters; that after consultation with employers and workers organizations concerned, the competent authorities shall take such steps as are considered necessary to ensure the observance of the regulations before mentioned, and that statistics with regard to lead poisoning among painters shall be obtained: (a) as to morbidity—by notification and certification of all cases of lead poisoning, (b) as to mortality—by a method approved by the official statistical authority in each country. This compromise, which was objected to by the employers' delegates from Canada and Denmark, was finally adopted as a convention.

By a vote of 92 to 5 a convention was carried securing to all those engaged in agriculture the same rights of association and combination as are held by industrial workers, and guaranteeing the repeal of any statutory or other provision restricting such rights in the case of those engaged in agriculture.

Another convention extending to agricultural wage earners the benefits of all laws and regulations which provide for the compensation of workers for personal injury by accident arising out of or in the course of their employment, was carried by a vote of 81 to 13, the Canadian employers' delegate voting with the minority.

A convention was adopted prohibiting the employment in public or private agricultural undertakings of children under fourteen years of age, except outside the hours of school attendance.

Weekly Rest Day

The commission on weekly rest brought before the Conference a convention providing that not later than January 1st, 1924, the whole of the staff employed in all industrial undertakings shall enjoy, during each seven days, a period of rest comprising at least twenty-four consecutive hours, to be granted, where possible simultaneously to the whole staff, such day of rest where possible to coincide with that already established by the traditions or customs of the country or district. Each subscribing country retains the right after consultation with responsible associations of employers and workers, to authorize total or partial exceptions, but so far as possible where any diminutions are made, compensatory periods of rest shall be provided. The employers took strong exception to the provision for compensatory rest periods. It was pointed out that where overtime or weekly rest day work is required, the employer usually has to pay double, and in some cases treble rates of wages, and that it was unfair that the compensatory rest periods should be made compulsory in addition to such increased earnings. An example was cited of a small factory employing a single engineer who, owing to a break in the machinery, was compelled to work five hours at treble rate of pay on Sunday, the usual weekly rest day, and who on the following Wednesday might demand his compensatory rest period, thus closing up the whole factory. Notwithstanding the force of the argument, the Conference by a vote of 58 to 41 decided to retain the provision, the Canadian Government and employers' delegates voting for its elimination. The convention was then adopted by a vote of 73 to 24.

The seven conventions thus briefly outlined will be operative, of course, only in such countries as enact legislation to bring them into effect. By its membership in the International Labor Office, Canada has assumed no obligation other than to submit the conventions to the "competent authority," and it then devolves upon that "competent authority," whether it be the Dominion Parliament or the various Provincial Legislatures, to take such action, if any, as may be deemed proper.

Agricultural Questions

A recommendation to develop vocational agricultural education, to make such education available to agricultural wage earners on the same conditions as to other persons engaged in agriculture, and to secure at regular intervals for the International Labor Office reports containing the fullest possible information as to the administration of the laws, the sums expended and the measures undertaken in each country to develop vocational agricultural education, was unanimously carried.

The commission appointed to deal with unemployment in agriculture recommended that each country should consider measures for the prevention of unemployment suitable to its economic and agricultural conditions and should examine particularly the advisability of adopting modern technical methods of bringing into cultivation land at present partially or inadequately worked; of encouraging the adoption of improved and more intensive systems of cultivation; of providing facilities for settlement on the land; of providing transportation facilities for unemployed agricultural workers going to temporary employment, and for the development of industries and supplemental forms of employment to relieve seasonable unemployment. It also recommended encouraging the creation of agricultural workers co-operative societies for the working, purchasing and renting of land, by granting or increasing agricultural credits to co-operative associations of land workers established for the purpose of agricultural production. The last mentioned was opposed by the Canadian and practically all other employers' delegates, the vote being 32 for to 58 against the elimination of that particular suggestion, the Canadian Government delegates abstaining from voting. The recommendation as a

whole was then placed before the Conference and carried by a vote of 75 to 19, the minority consisting entirely of employers' delegates.

A recommendation to extend to agricultural workers the benefits of laws and regulations in connection with systems of insurance against sickness, invalidity, old age and other similar social risks, on conditions equivalent to those prevailing in the case of workers in industrial and commercial occupations, was carried by a vote of 81 to 2, the dissenters being the employers' delegates from South Africa and Canada.

Employment of Children

One of the Agricultural commissions recommended that steps be taken to regulate the employment of children under fourteen years of age during the night in such a way as to ensure them a period of rest compatible with their physical necessities, and to consist of not less than ten consecutive hours and in the case of young persons between the ages of 16 and 18 years, a period of not less than nine consecutive hours. In this recommendation, which was adopted by a vote of 82 to 5, no provision was made for exceptions; if enacted into law it would be absolutely mandatory and might make of an act of mercy a criminal offence. One delegate in opposing the proposition said the recommendation showed:

> "The tendency of the Conference to let itself go in a mere expression of sympathy instead of regarding the recommendation as a resolution that must be translated into action,"

and speaking of occasional necessary night work pointed out that men slightly under eighteen naturally consider themselves the physical equals of men of much greater age, and that in countries such as India, the adoption of the recommendation would be imposing restrictions on one who might be a family man with two or three children to support. The Canadian employers' delegate voted against the recommendation, the Canadian workmen's delegate for the recommendation, and the Canadian Government delegates abstained from voting.

A similar recommendation guaranteeing to women wage earners in agricultural occupations a nightly period of rest of at least nine hours, where possible consecutive, was adopted by a vote of 90 to 4.

Another recommendation was that women wage earners employed in agricultural undertakings should be given protection before and after child-birth similar to that granted by the Washington Conference to women in industry and commerce, such measures to include the right of a period of absence from work before and after child-birth, and to a grant of benefit during the said period, provided out of either public funds or by means of a system of insurance. This was carried by the following vote—for 65, against 16, abstentions 8, the Canadian delegation voting the same as in the case of young people employed in agriculture.

Living-in Conditions

The agricultural commission recommended that, after consultation with employers and workers organizations concerned, statutory or other measures should be taken to regulate the living-in conditions of agricultural workers; that such measures should apply to all accommodation of workers whether provided in the houses of employer or in buildings placed by the employer at the workers disposal; that such measures should contain provisions for heated rooms, except where these might be by reason of climatic conditions, unnecessary; that separate beds should be supplied to each person, together with facilities for insuring personal cleanliness; that provision should be made for the separation of the sexes, and that stables and open sheds should not be used for sleeping quarters. The vote on this was, for 74, against 12, abstentions 4, the Canadian delegation dividing as in the former vote.

Weekly Rest Day

The commission on weekly rest in commercial undertakings recommended that the whole staff employed in every commercial establishment should enjoy during each seven days a period of rest comprising at least 26 consecutive hours, simultaneous for the whole staff, and wherever possible on the days already established by the traditions or customs of the countries, and that such countries as find it necessary to make exceptions to the recommendation should at once and every two years thereafter communicate to the International Labor Office a list of modifications which it had been found necessary to adopt. This recommendation was duly passed by the Conference.

The recommendations similar to the conventions will become operative only in such countries as make them effective by legislative enactments.

The commission on anthrax realized from the commencement of its meetings that the wide difference of opinion among its members rendered impossible the securing at the present time of any convention or recommendation governing disinfection, and after inquiring closely into the steps which have been recently taken to provide for disinfection of dangerous wools, contented itself with a resolution stating that, while there is danger to workers of anthrax infection from hides, skins, and other materials so serious as to deserve careful study and investigation, it was not considered that the question of universal compulsory disinfection in its economic and humanitarian aspects had yet been sufficiently studied to justify international



The British Delegation at the Geneva Conference

In this interesting group will be noted several well-known figures. Standing in the centre of the front row is Lord Burnham, familiar to Canadians through his visit to the Dominion in 1920 as head of the Imperial Press Conference. Lord Burnham discharged the duties of president of the conference. Near the left end of the front row stands Gerald H. Brown, asistant Deputy Minister of Labor, one of the representatives of the Canadian Government. Towards the centre of the third row is S. R. Parsons, representative of Canadian Employers. His advisor, E. Blake Robertson, stands in the back row. Tom Moore, representing Canadian labor, is at the right of the second row.

action, and that therefore the Labor Office should appoint members representing the chief producing and manufacturing countries (including the United States of America) to serve as an advisory committee, to examine the whole question, including the possible solution of the problem by eradication of the disease among animals. The resolution asked that a report of the findings of the advisory committee be made to the Conference held in 1923. The resolution in this form was unanimously adopted by the Conference.

The Governing Body

The reform of the constitution of the Governing Body, the first item on the agenda, was referred to the Commission of selection, which in effect reported that until a more definite decision was reached as to which countries form the eight states of chief industrial importance. it is impossible to bring about any reform which would be other than partial, provisional and unsubstantial, and that the item therefore should be placed on the agenda of the forthcoming Conference. Considerable discussion took place as to the disproportionate representation which European countries enjoyed on the Governing Body. Speaking on this subject Mr. Nasu of Japan said:

> "There are 25 European countries and 27 non-European countries which are members of this International Labor organization; the non-European countries have the numerical superiority. How then does it happen that while European countries get more than two-thirds of the seats, non-European countries will be represented by less than one-third of the total seats of the Governing Body? It is against the principle of democracy. If this International Labor organization wishes to remain really international in its character it should not prejudice its non-European members. I wish to remind you that one reason of our not having many non-European delegates here is because too much importance has been put upon the European countries in the past and consequently some overseas countries get somewhat disappointed,"

and later in conformity with the ideas thus expressed, he moved that one-third of the Governing Body be from non-European countries, but the motion was hopelessly defeated.

Collective Agreements

By a resolution adopted on a vote of 48 to 27, the competent authority of each country was invited to encourage collective agreements between the employers and workers organizations in order to fix, wherever the working conditions of the industry, trade or profession permit, a re-arrangement of the hours of labor which will allow the extension of the weekly rest to at least thirty-six hours.

By resolution there was expressed the hope that the commission of experts inquiring into the subject of disabled workers shall meet as soon as possible.

The convention adopted at Washington concerning night work of young persons between fourteen and sixteen years of age exempted from its application regions devastated by the war. Countries so affected were requested by the Conference to apply the provisions of the Washington convention as soon as possible and at the latest by December 31, 1923.

The Conference considering that unemployment can be efficaciously combatted only by international means, instructed the International Labor Office to institute a special inquiry on the international aspect of the unemployment crisis and the means of combatting it. Mr. Crawford, the workers' delegate from South Africa, who was not hopeful of the result of such inquiry, said in part:

> "The unemployment question is not one which can be dealt with on sentimental lines; it is a scientific problem and one that requires treating in a scientific way. Economic law is something which is superior to all human considerations. Governments cannot do anything to avoid the workings of economic law, and neither can our working class organizations nor our employers organizations. The stage that we have arrived at in the progress of human society today is the outcome of centuries of evolution, and we are not going to alter drastically the present condition of affairs in order to cure the present phase of unemployment which is pressing on us today. We have got to abandon any idea of immediately solving the question by the doctrines put forward by the Socialist. The object of my remarks is to warn the Conference and to warn the unemployed workers that they must not expect too much from anything the Governing Body can do. In my opinion we want to impress on the workers who are out of work that if they want anything done to assist them in their present difficulty, they will have to be up and doing and do it for themselves."

For Further Study

Several resolutions which came before the Conference were referred to the Governing Body for further study and possible action; these included:

1. Addition of German, Spanish and possibly the Slav language to the official languages already in vogue at International Labor Conferences.
2. The international standardization of qualifying examinations for certificates of aptitude in mining, electrical and mechanical engineering, engineeering in mercantile marine, and other like occupations, with the object of having such certificates accepted internationally.
5. The examination of the hours of labor in commercial undertakings with the object of deciding the expediency of placing this question on the Agenda of a future Conference.
4. The study of the question of night work in bakeries with the object of recommending prohibition of such work at some future Conference.
5. The presentation at the next Conference of a report on the result of the inquiries conducted by the League of Nations in connection with the international regulation of the distribution of raw materials.
6. The consideration of the creation of a Commission composed of representatives of national organizations of intellectual workers to assist those who derive their means of existence from imaginative or intellectual work to obtain better conditions of life thus assuring a fuller development of their work.
7. An examination as to the possible extension of the use of Esepranto in connection with International Labor Office publications.
8. The careful study of the different aspects of co-operation connected with the improvement of economic and social condition of workers.
9. That there be placed on the Agenda for 1922 the reform of the standing orders, and that in the mean time the Governing Body carefully study same and make a report to the next Conference.
10. A methodical inquiry by the International Labor Office into the possibility of developing agricultural production, possibly by the submission of that and similar proposals to a joint Agricultural Commission formed along the same lines as the Joint Maritime Commission.
11. The question of placing on the Agenda at some future date the feasibility of protecting workers against various occupational diseases by instituting a system of compulsory medical inspection of workers.

The conventions, recommendations and resolutions already enumerated cover fairly completely the work of the Third Conference.

The Director's Report

The success, failure or scope of activities of many organizations depends largely upon the driving force of those in charge. This is true of the International Labor Office, and for that reason the Director's report, as presented to the Conference, outlining as it does his views of what the Labor Office is, what it should be and what it should do, is worthy of some attention. On page 59 of his report Mr. Albert Thomas says:

> "The International Labor Office is the outcome of a general movement for more equitable and humane conditions of work in modern industry, and for the prevention of competition which might impede the efforts of the nations which desire to ameliorate the lot of their workers."

The Director would appear to be amongst those who believe that fear of revolution was the main reason which brought about the inclusion of labor provisions in the Peace Treaty, because in his report he says:

> "It cannot be doubted but that a reaction has taken place against the state of feeling which in 1918 and 1919 led the majority of the Parliaments to adopt, often unanimously, resolutions instituting the 8-hour day and the 48-hour week. Have those ideas of social union, those strivings after solidarity, disappeared? Has the world, as some say, ceased to be afraid of, or to give any heed to, "the blackmailing threat of revolution"? Or has public opinion been seriously and directly diverted by the economic consequences of the reform? Or, again, has competition on the world's markets become such that the majority of industrial States cannot undertake to establish by ratification a reform to which they seem to have adhered of their own accord?"

Action on Conventions

It will be remembered that the majority of the conventions at Washington in 1919 were adopted almost unanimously and the fact that many of the countries which voted for such conventions at Washington took no steps to implement by legislation their implied promise, naturally called for some explanation from the Director, which, on page 113 of his Report, he makes in the following words:

> "After the war in all countries a spirit of conciliation or compromise, sometimes as a result of common participation in national dangers, sometimes as a result of the natural equilibrium of organised social forces, has pervaded the relations between employers and workers. In almost all countries industrial organizations have seen their membership increased to formidable proportions, and collective agreements have become established in practice. But now there is no doubt that in many cases national bonds have been loosened and that class warfare has been revived. In a considerable number of countries which

had before the war no long-standing acquaintance with large organizations, the membership of trade unions has fallen away, their power has been diminished, less attention has been given to their opinion and their reforming influence has been comparatively shattered. It is the combination of these factors which is responsible for the slowness of ratification of the Draft Conventions in the various countries."

and speaking of the present attitude towards the Washington conventions, he says:

"It might perhaps be difficult to obtain the same majority, and in any case the same unanimity as was manifested at Washington."

The reasons advanced by some of the Governments for failure to ratify Conventions either do not appear to the Director to be sincere, or the Director considers his organization is much more competent than the governments concerned, because on Page 117 he says:

"If Great Britain had consulted the Office with regard to overtime and the regulation of work on the railways, perhaps careful consideration on both sides might lead to a solution."

Influence of Director

The Director is a man of considerable ability. Keen, resourceful and skilled in the game of international politics, his dynamic force and his impassioned oratory coupled with his recognized standing in the Socialist Party, gave to his utterances, when addressing the Conference of which socialists formed no inconsiderable part, importance which few of the regularly appointed delegates could hope to equal. Neither in his report, the administration of his office nor his attitude at the Conference did he seek to convey any impression that his belief in or adherence to socialism has wavered or is wavering. However pleasing his attitude may have been to some of the European nations, few Canadians wish to see Canadian laws, directly or indirectly influenced by European socialism, the disastrous effects of which, at the present time, are so frightfully apparent in some European countries. If Mr. Thomas remains in his present position without dominating the policy and actions of the International Labor Office and to a considerable extent the decisions of future conferences, it will be a matter of surprise to many who saw the influence he exerted at Geneva.

Lord Burnham's Warning

In his address at the closing of the Conference, Lord Burnham, sounding a note of warning regarding too much speed by the organization, said in part:

"Internationalism must be founded on nationalism, and must stand fast in equity and truth between nations, on sanity and judgment between communities and Classes .....Insularity of position may have been—may still be, in spite of air attack—a strong defence in war; insularity of mind is not helpful in the consideration of economic problems.....Let me appeal to this world-wide Conference to think in terms wide as the world. This is not a European Conference, and in the future the other continents are not going to yield the same pride of place to Europe that she had had during the ages of privilege without cavil or question.....The principle of equality applies to continents as well as to states. May I express the hope that the maxim to govern your proceedings may be "festina lente"; be slow in progress. It strikes me that there is a disposition to put too heavy a load on the machine in the first years of its operation. There are no panaceas for the evils that affect mankind; there are no pills for earthquakes. If you strain the bearings of the machine it will fly apart in "disjecta membra"..... What you want is a moving platform of social reform which all alike can mount stage by stage."

A Survey of Results

When the First Conference closed at Washington supporters of the International Labor Office said that criticism should be withheld until the organization had an opportunity to get its machinery running smoothly and a chance to show its usefulness. Now that the Third Conference is closed it does not seem unreasonable to examine the whole scheme from a broad general standpoint. The fact that of the 54 countries entitled to be present at Geneva 15 sent no representatives, is regarded by some as forecasting a general disintegration.

At Washington one of the proposals for the relief of unemployment was the abolition of the private ownership of property. At the Genoa Conference, countries with no coast line and no shipping almost succeeded in having adopted unworkable maritime conventions. At the Third Conference just closed a proposal was put forward to set aside the immutable law of supply and demand by arranging for the international regulation of the distribution of raw materials, and this subject is likely to come up at the next or some succeeding conference. Propositions such as these tend to arouse the fear that by a continuation of the International Labor Office and the yearly labor conferences, the nations of the world will be warming in their bosoms, a serpent whose sting, if not drawn, will eventually bring communism, anarchy and chaos.

Effect of Publicity

By judicious handling on the part of those who realize that publicity for communistic and other hare-brained schemes would arouse the ire of the thinking nations, many of the propositions discussed in committees were prevented from reaching the Plenary Conference, whose proceedings are reported by the press. The world-public is thus left without that particular knowledge of the Labor Office activities and the labor conferences, which if disseminated might destroy confidence in the future of both.

A factor which mitigates against the success of the International Labor Office is its claim of the right to issue one-sided documents regarding items on the conference agendas. True, they cite the opinion of a body of so-called experts, known as the "Commissions of Enquiry," or "The Commission of Experts," in justification of their stand, but this merely means that the report of that Commission in this respect at least is not worthy of serious consideration. No nation will view with favor the expenditure of any portion of its monetary contribution for the dissemination of biased statements against that nation's interests. This was well illustrated in the case of the proposed prohibition of the use of white lead in painting. One of the documents issued on the subject was extremely biased, and contained numerous mis-statements. The Director's explanation that errors had crept in owing to his office being overworked may be considered a mitigating circumstance, but the errors when coupled with the fact that the galleries and lobbies of the Conference Hall were haunted by representatives of the zinc interests, which stood to profit by the prohibition of white lead, that the mail boxes, desks and even the hotel rooms of the delegates were flooded with zinc paint propaganda, led many to believe that the International Labor Office was being deliberately used by certain countries in an attempt to further their economic interests at the expense of others.

The fact remains that the general scheme of the International Labor Office and the yearly labor conference is an attempt to make alike the labor laws and the working conditions of all countries. Climatic, social and racial distinctions make such an attempt fundamentally unsound, and being fundamentally unsound the attempt can reach no termination other than failure.

If no items were placed on future agendas except such as were ripe for almost universal action; if the three groups approached subjects in an honest effort to improve human conditions generally without attempting to enforce unworkable and undesirable uniformity of legislation in countries whose conditions are diametrically different; if no further attempts were made to utilize the conferences to enable one country or set of countries to secure economic advantages over others, future conferences might be productive of some good, but at present the pathway of the International Labor Office appears to be a thorny one, and its principal danger more from within than from without.

The Future Course

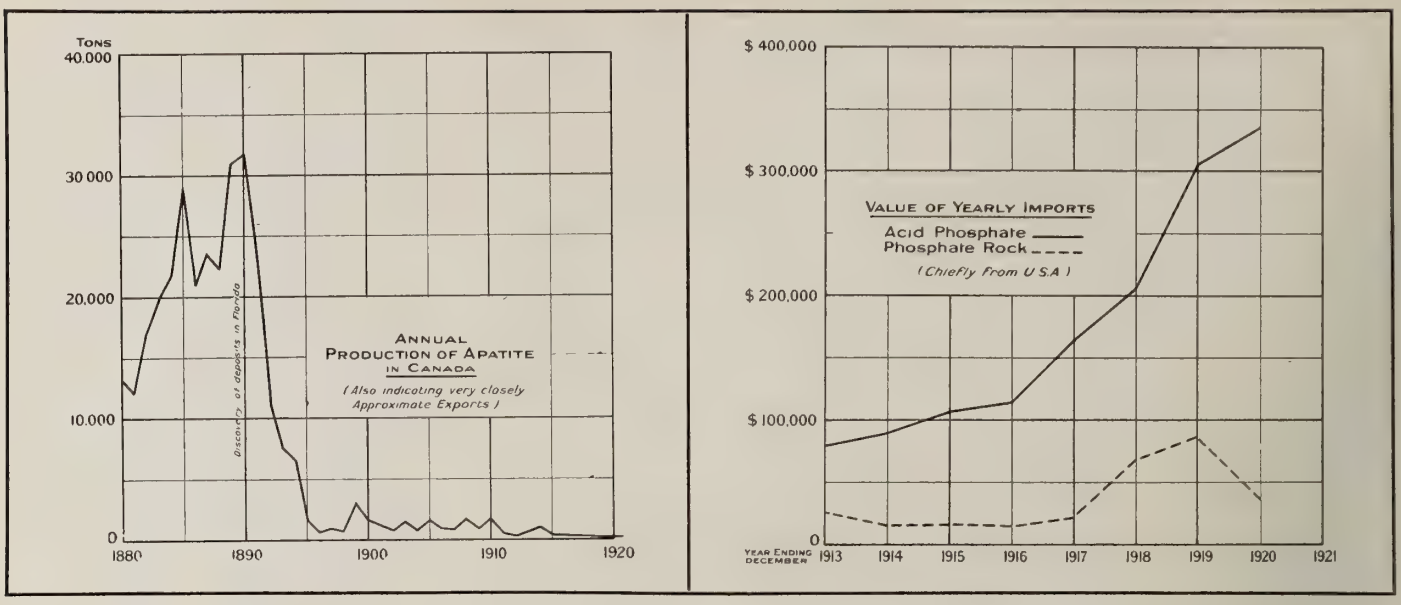
Those who are opposed to the whole general scheme are divided in opinion as to the course which should be followed in future. Some favor refraining from sending delegates to future conferences; others feel that by so doing those attending will, without the restraining influence of the more sane, recommend courses likely to result in undesirable legislation in other countries, the indirect influence of which will be felt even in countries not belonging to the organization, and that therefore those belonging to it, even though not believing in its work, should attend in order that their restraining influence may, like the fly-wheel, prevent the engine from running wild. In the comparatively near future a decision regarding the attitude to be taken in connection with the Fourth International Labor Conference must be reached by the Dominion Government, and by the employers of Canada.

Successful Tenderers in Morwell Electrical Scheme

Details have just been received as to the successful tenderers on material for the Morwell Scheme of the State Electricity Commissioners of Victoria, Australia, and although the majority of contracts have been allotted to English, Scotch and American manufacturers, at least two contracts have been secured by Canadian firms.

This scheme for the utilization of the brown coal deposits near Morwell to furnish electricity throughout the State was decided upon in September, 1920. The Victorian Government arranged to spend about $15,000,000 on the project and called for tenders on various materials including steel towers, aluminum cables, insulators, telephone apparatus, alternators and turbines. Through the excellent work of Mr. D. H. Ross, Canadian Government Trade Commissioner in Melbourne, manufacturers in Canada were not only promptly supplied with tender forms and specifications of the requirements but were kept advised of all developments.

While the results are not what we wished for, the fact that a few Canadian tenderers were successful gives some satisfaction. We have made a good start in this direction and anticipate better success in the future.



Canada's Resources for Phosphatic Fertilizers

A Survey of the Situation with respect to the Production of Phosphates from the Apatite Deposits in the Province of Quebec.

Specially Prepared by the Natural Resources Intelligence Branch, Ottawa.

PHOSPHORUS is a part of the stock-in-trade of any nation efficient in agriculture, industry or war. Its use is constant in pharmacy and the chemical laboratory and for industrial use in the making of matches, or rat poison, or baking powder, while at any time a break-down of the League of Nations may divert it to incendiary bullets and smoke-screens from its most important use as a fertilizer.

Occurrence of Phosphorus

Phosphorus is a constituent not only of all plant tood, but of protoplasm, the basis of life. It is not found free in nature, but in the form of calcium phosphate, of which bone and certain rocks are mainly composed. Such rocks are either crystalline (apatite or phosphorite), sedimentary or nodular (coprolite), and are known generically as phosphate rock. Phosphorus also occurs as a rather troublesome inmate of iron ore, but becomes a useful by-product in the basic slag through whose agency it is evicted.

The other phosphatic minerals, as implied by their names, turquoise, torbenite, lazulite and vivianite are rare, and it is only the last two that are found in Canada at all.

Peruvian, bat and other guanos, whales and dogfish, bones, hair, horns and hoofs, and the bone-black which clarifies sugar in refineries are also valuable sources in fertilizing phosphates, and the fish waste which contains phosphorus in addition to its high percentage of nitrogen will be some day as carefully husbanded in Canada as is the tankage in a large meat packing plant.

It may be inferred from the above paragraphs that the use of phosphorus continues to grow, and that its main source is phosphate rock. This is abundant in most parts of the world. In North Africa beds extend from Morocco to Egypt. Islands of the Indian and Pacific oceans, notably Nauru, now administered under mandate by Britain, have very large high-grade supplies, and though European reserves are on the verge of exhaustion, in Russia, New Zealand and South Africa new fields are opening up.

In the year 1890 big deposits were discovered in Florida, South Carolina and later in Tennesee and Kentucky, and since then an estimated reserve of six billion tons has been found in Arkansas, Utah, Idaho, Wyoming and Montana in a field that overlaps into Canada.

At the time of the Florida discovery, the apatite deposits in Quebec and eastern Ontario were actively worked, the export to Europe in 1890 amounting to 31,000 tons. Since then competition with phosphates produced in the southern States has been impracticable, and the Canadian supply of rock for superphosphates is now but a by-product of the mica in the same district.

Prospects of Improvement

The problem before us is to consider whether any facts have occurred within the last thirty years to lessen the cost of production and delivery, and generally to improve the prospects of the owners of apatite mines in eastern Canada.

It seems that there are several straws that indicate a favoring breeze, but which may not yet be strong enough on which to lean. The factors of the most importance are freight charges, water power and improved processes of production. Phosphate rock is heavy. In 2,240 lbs. you cannot get more and you often get less than 400 lbs. of what you want. The rest is "carrier." Freight charges have in the last few years increased to such an extent that it looks as though the long distance haul from Florida ports or by rail through the United States to points in Ontario or Quebec would leave a workable margin in favor of the comparatively short haulage to the same points from phosphate mines in Ontario and Quebec. Present facts, it must be admitted, combat this view when we see a fertilizing company in the heart of the Quebec apatite district now using imported Florida pebble phosphate in place of domestic apatite as before, and when water-borne rates direct to a waterside factory are now more easy than of late years.

The increasing use of "double" superphosphate is however, tending to lessen the percentage of "carrier." As the highest amount of phosphoric acid produced from any rock is not more than 18%, there is 82% left for dead-weight. Experiments have therefore been made to avoid this waste, one of the most notable being the application of the Cottrell precipitator in the furnace method of smelting phosphate rock, sand and coke. The cost of this process has been estimated at 3.39 cents per lb. of P_2O_5 with hydro-electric power at $25 a h.p. year, or at 2.49 cents per lb., if oil is used in place of the electric arc. At the same period, (1918) the selling price of phosphoric acid was 6.25 cents per pound. It seems, incidentally, quite possible that natural gas in Alberta might be utilized in connection with the low grade sedimentary deposits there existing.

Fertilizer Production

The application to phosphate rock of phosphoric acid, thus economically produced, in the place of sulphuric acid, produces a concentrated phosphate fertilizer containing about three times the usually available P_2O_5. The fusion treatment above indicated has the further advantage of not needing such freedom from impurities in the rock, nor such a high percentage of calcium phosphate in the rock as is required in the sulphuric acid process. It may also be noted here that the treatment with sulphuric acid, the cost of which is estimated at 23% of the value of the product, is uneconomical, statistics showing that three-quarters of the world's pro-

duction of sulphuric acid is used in the manufacture of superphosphate, and is thus lost in the soil, while owing to the presence of calcium fluoride in the rock a considerable quantity is uselessly consumed.

Increasing attention has also for some years been paid to the use as fertilizer of finely ground raw rock phosphate. The phosphorus in such rock is neither soluble in water, nor in citric acid, i.e., it is neither "soluble" nor "reverted," but it is said that farmers have gradually been increasing their demand for it. The United States Department of Agriculture has conducted lengthy experimental work on this line, and cautiously admit that, if the rock is very finely divided, and intimately mixed with soil which is thoroughly cultivated, the effects are productive of increased yield, while the presence at the same time of the bacterial activity and high content of carbon dioxide in organic manure renders the raw ground rock still more effective, especially as time elapses. If this is proved to be the case with Canadian apatite, it would seem that there might be a market for this raw rock in Canada, with which raw ground phosphate from a distance could not possibly compete.

Effect of Cheap Power

In most manufacturing processes the supply of water energy is a big factor in the elements of cost. Reduction of phosphate rock by electric processes depends entirely on such cheap power as is available in Norway or Canada. Although in big industrial centres the demand for all spare water power is greater than the supply, the possibility of using reserves in less busy regions such as described may help to solve the problem. Without cheap water power any of the thermo-electric processes for production of phosphate would be economically unsound.

Turning to the reverse of the shield it must be admitted that the only phosphate reserves in eastern Canada which may be considered economically important do not admit of large operation by steam shovelling, dredging or hydraulic mining as in the southern States, since the apatite occurs in irregular pockets and is less easily handled than are the big sedimentary deposits. The occurrence of mica in many of these Canadian apatite workings is, however, an asset of value, as is also the high percentage of phosphate in the rock.

Nor should it be lost sight of that the fertilizer interests in the United States handle seven million tons of chemical fertilizer annually, with a constantly increasing demand for its use in cotton, grain and fruit production. On general principles it is risky for an earthen pot to float down a stream and talk to an iron neighbor, but any argument must proceed on the assumption that there is no "restraint of trade."

Canada's Importations

The figures below show the amounts on our import bill of phosphate rock, acid phosphates and compounded fertilizer, of which a considerable proportion is probably acid phosphate. Is the inference reasonable that, to say nothing of the tariff, it will continue to be cheaper to pay abroad for importation of what is mostly dead weight, when conditions hint at the chances of the revival of a by-gone industry?

IMPORTATIONS, 1920

Material	Quantity	Cost
Acid phosphate	1,600	$337,253.00
Phosphate rock	4,106	37,373.00
Compounded fertilizers	.....	748,382.00
Total fertilizers	.....	1,753,307.00

Conditions in Vancouver During the Past Year

Substantial Progress made in Manufacturing, Building, and Export and Import Trade in 1921

By E. B. B. Reesor
Editor, Vancouver Publicity Bureau

THE population of British Columbia, 1921 census, is 765,000, an increase of 88 plus per cent since the year 1911. The City of Vancouver, at the age of 35 years, has a population, with suburbs, of 225,000, plus 15,000 Orientals. This is an increase of 23,000 in one year.

In the Municipal Revenue Department, which honestly reflects the status of the city, it is shown, that while no very large public buildings were erected, the number of new homes built was double the number put up during 1920. 2451 building permits, valued at $3,045,132 were granted in Vancouver City alone, without including the six adjoining municipalities, where the building of homes was greater than has ever been. Trades license fees amounted to $269,331.95, a $40,000 increase above the previous year, and there was no trouble in collecting the fees. There is a 60 per cent increase in domestic water users, with a $1000.00 increase in fees.

The death rate was 10.1 per one thousand of population, and the birth rate was 29.2 per thousand.

Members of the British Columbia Branch of the Canadian Manufacturers' Association, report that never before in Vancouver was there so much export and import business as that done during the year 1921. Ships of fourteen different lines are now operating from the Port of Vancouver to every part of the world, and the sight of Trans-Pacific vessels, laden with British Columbia products, daily leaving the docks, is proof of development, and an earnest of the greater industry, production and revenue for the whole of British Columbia, and for Vancouver in particular, that is awaiting business enterprise just ahead.

Vancouver has 675 factories employing 18,733 workers, and having a total production of the value of $87,786,041. The increase in the manufacturing business figures was most marked during the months of October and November, (December figures are not in yet) and manufacturers are entering upon the new year fully anticipating a continuation of the revival of business.

One of the largest establishments in Vancouver has reported that on December 20th, 1921, its sales were within five per cent of the corresponding period of 1920, notwithstanding the fact that the prices were, on an average, 30 per cent lower during the past 12 months. This fact was taken as indicating a much larger volume of buying this year than last. In the beginning of the year 1921, the decline of the cost of commodities of almost all kinds began to appear, and has continued, gradually, since, with the result that to-day luxuries are down 30 to 10 per cent; clothing has shown a similar drop; boots and shoes are down 35 to 40 per cent, and other commodities have gone down in like proportion.

Following an advertising campaign, which the Vancouver Publicity Bureau had been asked to undertake, telling the grain growers of mid-Western Canada that their wheat could be more easily and economically shipped through the Port of Vancouver and via the Panama Canal to Great Britain and European points, and pointing out the Oriental market awaiting their produce, the rush of grain shipments to Vancouver has been so large that greater and greater elevator space is already being aranged for. So far something like 80,000 tons have been booked, and it is expected that twice that amount will be shipped during the season. 25,000 tons have already been moved. This is a quick return for less than three months advertising in prairie papers.

The export lumber trade, from Vancouver, is looking up, and stagnation is at an end, though no great lumber boom is expected. Japan has been taking large quantities of



View of Industrial Island, Vancouver

Close proximity to docks and railroad terminals enables manufacturers to load their products on trains or ships direct from their factories or warehouses

British Columbia lumber during the year, and steady shipments have been made to Australian and New Zealand ports. Pulp and paper making has increased slowly but steadily right through the years ofdepression, and more pulp mills will be operated throughout the province.

Fruit and vegetable production has been excellent, prices good, and farmers and orchardists are in excellent financial shape.

Mining is coming again into its own, after a slack year or two, and the fishing industry has disposed of all its old pack, which was rather a drag on the Vancouver market for some months, and has markets ready and waiting for this and next year's fish.

The changing of the rule of the road, from left passing to right passing means an even greater increase in the tourist industry throughout British Columbia, and, the building of the from-Hope-to-Princeton Highway, which will complete an all-in-British Columbia motor road to the province of Alberta, and from there, right across Canada to the Atlantic, will see a fine making of parks and camping places for motorists all through the southern valleys of B. C. The city of Vancouver, alone, placed the earnings from its tourist travel at $7,500,000 during 1921, and about double that amount for the whole province. More professional attention is being given to advertising Vancouver, and the better service given, the greater results are shown.

There is nothing but optimism felt in British Columbia in regard to professional, commercial and industrial businesses for the future, though no boom is expected, nor do people want a boom.

Trade With Venezuela is Discussed

A MEETING of the Executive of the newly-formed Export Club of Montreal and District was held on January 21 at the Old Colony Club at the Windsor Hotel, when an address was given by Mr. Guillermo Todd, Venezuelan Trade Commissioner, and Commercial Attache to the Venezuelan Legation at London, on the opportunities for trade between Canada and Venezuela.

Following Mr. Todd's address, the Executive discussed with him the question of the sending of shipments to order, Mr. Todd stating that the Venezuelan laws did not permit the sending of merchandise consigned to order. This, it was stated, was a practice started when Germany was making inroads into foreign markets, and was practically responsible for the custom, which the Venezuelans now wanted extended to all nations.

Considerable objection to this practice was expressed by the Canadian exporters present, and Mr. Todd promised that on his return to Venezuela he would take the matter up with his Government, in an effort to have the difficulty straightened out.

Mr Todd stated that his mission to Canada was particularly to secure a direct line of steamships between Canada and Venezuela. He considered that there was ample room for reciprocal trade, Venezuela producing many lines of goods which might with advantage be imported direct to Canada, while Canada had many lines of manufactured goods which would find a ready market in Venezuela.

At the present time, he said, there was no direct steamship service between the two countries, but it was understood that the Royal Mail Steam Packet Line boats, by adding two days to their trips, could include certain Venezuelan ports, this line being subsidized by the Canadian Government.

The question of the transportation of carbide by the Canadian Government Mercantile Marine boats was also discussed, with the refusal of these boats to carry such cargo at present, although other lines carry carbide. It was decided to take this matter up with Hon. James Robb, Minister of Trade and Commerce, and Hon. Ernest Lapointe, Minister of Marine and Fisheries.

Some discussion also arose on the matter of preferential trade agreements, and it was decided that the Export Club should take this matter up with the Government authorities.

It was also decided that the Secretary should secure copies of export trade magazines of prominence and keep them on file at the office of the Club, at the Board of Trade Building, for the convenience of the members.

Spot Goods are Aids to Sales Abroad

As George E. Anderson, Consul General of U. S. for the Netherlands, and stationed at Rotterdam, recently pointed out, nearly all export business to North Europe is now being done on a consignment or spot basis, or under terms and conditions that amount to the same thing. This applies particularly to goods for the Netherlands and Belgium, and through these trading centres into Germany and Central Europe.

Terms of cash against documents on arrival, and even liberal credit allowances, will not answer. The buyers' problem is at present not so much a matter of price or credit as of exchange. During the time it takes goods to arrive from the United States, exchange may have fluctuated to such an extent that the importer finds his competitor, who has bought nearer home and has consequently been able to purchase his exchange more recently, able to undersell him.

Much of the American goods sold in Northern Europe at present is said to be spot merchandise handled by way of Great Britain. U. S. exports to Germany in September were $37,296,559. Prices are fixed by the consignor on arrival of the goods abroad, and his risk,—assuming he has selected a safe custodian of the goods,—is a decline in prices while the goods are en route. If the commodity is one enjoying world prices the effect would have been the same had he kept the goods in stock at home. The chances are that he is better off, if anything, anyway, because the goods are nearer a potential market, where price changes are usually not so rapid nor so wide as at producing centres. Consignments should of course not be made without preliminary investigation of the demand and price tendencies of the foreign market.

Manufacturers producing staple goods subject to world wide competition and who are trading steadily in markets where exchange is fluctuating may see in this an opportunity to obviate cancellations or diminish losses by arranging with agents to settle prices based on current exchange quotations on arrival of goods.



Pulp and Paper Mills at Ocean Falls, B. C.

Illustrating the advantages enjoyed by the industry through close proximity to raw material, power and rail and ocean shipping. Cottages of work people are shown in the foreground and mills to the rear.

Future of the Shipbuilding Industry in Canada

Expert sees possibilities in construction of Modern Steel Canal Steamers, designed specially to meet existing conditions.

By Levy McMillan

Nova Scotia Steel & Coal Co., Limited, New Glasgow

As is well known the outlook at present for shipbuilding in Canada is not bright, but this may be said of almost every other shipbuilding country as well. In Canada several shipyards have closed or are closing with little hope of resuming operation; this refers mainly, of course, to shipyards opened during the war. The older yards will likely carry on with reduced staffs especially in connection with repair work. There is always a certain amount of new work for Government account which will remain with Canadian shipbuilders, but, for new work in competition with shipbuilders in other countries, there appears to be but little future.

One reason for this is that Canada is not in a sense a ship-owning country, and when a country does not own and operate fleets in a large way, she is not likely to be a ship-builder in a large way. One depends on the other to a great extent and their relation is more or less relative. While Canada is not a ship-owning country, there are two Canadian-owned fleets that deserve attention, especially in their relation to shipbuilding;—they are the Canadian Government Merchant Marine, and the steamers owned and operated on the Great Lakes and River St. Lawrence.

The government programme has been completed and it is doubtful if it will be extended or that even losses will be made good to any great extent. In any case there is little hope here for shipbuilders.

The Great Lakes' fleet of cargo steamers is divided roughly into two classes,—the large Upper Lake freighter and the Welland Canal size bulk and package freighter. The former are all built by Canadian lake shipbuilders or bought second hand from American shipowners, as the shipbuilder is protected by high duties on the one hand and small locks on the other. The latter type of lake freighter increased rapidly in numbers the last twenty years, or to be more accurate the last twenty years before the war. There have been, however, few built during the war or since the Armistice, and a large number have been lost. These will have to be made good and measures taken also to replace old wooden tonnage which, while still in active service, is nearing the end of its usefulness in many cases.

According to press reports the Harbor Commission intend building a new grain elevator in Montreal, and the Grand Trunk to double the capacity of their existing elevators. It is also intimated that the quantity of grain handled this year in the port of Montreal exceeded by millions of bushels any previous years. Here it would seem is a good opening for Canadian shipbuilders, an increasing trade and an apparent shortage of tonnage, although only about five per cent of these ships were built in Canada before the war, and there were upwards of a hundred in commission.

Where will the future canal steamers be built? From press reports, two orders from Canada have recently been placed with old country shipbuilders; this looks like going back to pre-war practice. There are doubtless good reasons for this; the lower cost being the most important, although this should not be as important a factor as before the war.

There is no question now about the number of workmen or their skill, or the quality of finished ships turned out by Canadian yards. Besides, practically every item entering into the construction of an ordinary ship is made in Canada on a competition basis. In a general way, however, the cost of items entering into ship construction have not decreased to the same extent as the ship as a whole. Old country shipbuilders are sometimes in a better position to extend credits than Canadian shipbuilders and this was frequently required, at least before the war by owners of canal steamers. There are better facilities for doing this in the old country not only by the shipbuilders themselves, but by bankers and brokerage houses, who specialize in this business and who know, or know how to find out, how much a ship is worth as security and how to protect themselves against loss. This could and should be done in Canada if it was required to assist not only the shipowner but also the shipbuilder.

The problem is roughly as stated. It would seem a legitimate field for the Canadian shipbuilder and it is largely a problem for him to solve, even if it means appealing for government assistance. While this is not a wholesome thing in itself, it might serve to establish the industry, especially in any experimental work. If this business, a purely Canadian trade, cannot be secured and held, how is it possible to hope to secure foreign orders in competition with foreign shipbuilders in touch with the foreign shipowner?



A Luxurious Steam Yacht

The "Sea King," recently built by the Nova Scotia Steel & Coal Company, Limited, for Baron Bliss, Nassau, Bahamas.

The river St. Lawrence and Welland canal trade is peculiar in that there is a tremendous traffic back and forth from Lake Erie ports to Montreal, wholly in the river or canal except for a run of about twelve hours down Lake Ontario. When the new Welland Canal is completed and terminals and elevators are established at Kingston, or Prescott, the run across Lake Ontario will be eliminated, for canal steamers carrying grain at least. There is an opportunity here for Canadian shipbuilders to improve the present type of canal steamer. The writer was intimately associated with two experiments in this line;—one the "Toiler" a Deisel engine vessel and the other the 'Tynount," a Deisel electric propelled vessel, both built by one of the most eminent shipbuilders in the world, Messrs. Swan and Hunter, Welland-on-Tyne. Both were failures as far as the machinery for canal work was concerned. The former operated for about a year in the canal trade, when the engines were discarded and an old type of steam engine installed. The latter ran a few trips on the East Coast when the equipment was condemned and steam engines were installed in their stead. The writer was Chief Engineer of this steamer within a few days of its being torpedoed in the North Sea in 1916, when nearly all hands were lost. The builders, Messrs. Swan & Hunter, deserve every credit in this instance for introducing something new. The idea of course, was to increase the deadweight for the vessel by reducing the weight of machinery or the light displacement of the vessel since the general dimensions could not be increased, as the locks limited the general dimensions. The builders were not wrong, except they were some ten or fifteen years ahead of their time.

Now the Canadian shipbuilder on the other hand is behind the time in this particular regard; this may be from lack of intimate knowledge of internal combustion engines, which is doubtful, or from lack of funds for experimental purposes which is more likely. It is not the intention of this article to outline definitely any new scheme in this respect, but, to give an indication to any one familiar or particularly interested in this trade, it might possibly serve some useful purpose to mention that a canal steamer could more easily and cheaply be built with a square bilge carried to the stern than a round one. The rudder could project at least three feet beyond the stern and be folded under the counter when in the locks; the stern could be an angle instead of a bar section, thus giving some four feet extra effective length to the vessel. Semi Deisel engines could be introduced instead of Deisel engines or Deisel Electro Drive, with more certainty of success. A full discussion of this is too long and technical for this article, but it is, or at least it is hoped it is, apparent that there is some scope for the Canadian shipbuilders' ingenuity right at his own door.

Some Further Reports on Conditions and Outlook

Supplementing the One Hundred and Fifty Reports from leading Canadian Manufacturers appearing in the January Number of this Publication

OWING principally to their receipt after the forms for the January issue had closed, the following reports on industrial conditions in Canada during the past year and views as to the outlook for 1922, had to be omitted from that number. They possessed such interest, however, and so clearly confirmed the opinions expressed by contributors to the January number that it has been deemed desirable to publish them. They accordingly appear on this and the following pages and we would ask our readers to take them carefully into account when sizing up the conditions reflected by the writers in the previous issue.

Metal Products

By B. W. Vallat

Dominion Forge & Stamping Co., Limited, Walkerville

THERE has been an unlimited supply of raw material on the market when required. Quality is good. Prices are from 25 to 50 cents lower. We do not expect the market to go much lower for steel products.

Labor is plentiful and more efficient. Wages have come down from 20 to 30 per cent.

The market for our products has been much less last half than the first half of the year. There is no improvement in demand at the present time.

Prices for finished products have been on the decline. We cannot say as to whether the bottom has been reached yet or not. This depends on competition. They are certainly as low as operating costs warrant at this time.

Since we do not ship outside of our local territory we have no complaint about freight rates on finished products. On supplies and raw materials received we expect reduction in freight rates. We do not see, however, how railroads can lower their rates until their operating costs decrease. One of the worst handicaps which industry has to face today is that the general cost of living for the employee has not been sufficiently reduced.

The outlook for 1922 at this time appears fairly bright. We look for a considerable change by early spring of 1922. The thing which we believe will be most helpful is a betterment in the foreign situation and a resumption of the export trade.

Machinery

By R. Bellamy

The William Kennedy & Sons Limited, Owen Sound

WE have found the supply of raw material ample, the quality good and prices fair. As compared with a year ago, prices are approximately from 25 to 40 per cent. lower. It is our opinion that prices have not yet reached rock bottom and will go somewhat lower. Wages have been reduced and labor is about 20 per cent. more efficient.

Prices of finished products are from 20 to 25 per cent. lower than a year ago and demand has been reduced. It is hard to say whether the process of deflation has been completed or not; we think not.

We consider the outlook for 1922 to be equal to if not better than for 1921 and believe that from now on gradual improvement will take place.

Buying Soon to Commence

By W. A. Laidlaw

Laidlaw Bale Tie Company, Limited, Hamilton

FUTURE conditions are a difficult thing to prophesy with accuracy in these times, when perhaps more than at any other time, world conditions affect each nation, if not each community. However, the writer feels optimistic about the future and is looking for steady improvement, more particularly after February or March, believing that most basic industries have reduced their selling price to the very minimum. In fact, many industries are selling below cost, particularly at the present time when volume is small.

There is one thing quite certain; people's desires are probably as great as ever. When people are satisfied that prices are right, compared with cost, they are likely to commence buying again. This means more work and, when everyone is engaged on productive work, we can undoubtedly have all our ordinary requirements supplied.

Practically speaking, no one appears to be overstocked with material. In fact, from our experience, people are ordering only current needs, which even in these times are keeping us fairly busy. It would not take very much extra business to make us consider our plant busy.

Automobiles

By A. F. Fuerth

The Studebaker Corporation of Canada, Limited, Walkerville

THE market for our production has been reasonably good throughout the past year and our sales increased considerably over those of 1920. The trend of prices on finished products has been downward in the majority of cases and, while we are not prepared to make a definite assertion, we believe they have about reached the bottom.

There has been a marked change in the labor situation and we have not found it difficult to obtain labor as compared with the previous year. In addition to this wages have been reduced approximately 10 per cent. and efficiency has been considerably increased.

We look for results in 1922 to be equal to and even better than in 1921 and feel that, providing things have been adjusted, this will prove an added reason for better conditions throughout the country.

Boots and Shoes

By Albert Tetrault

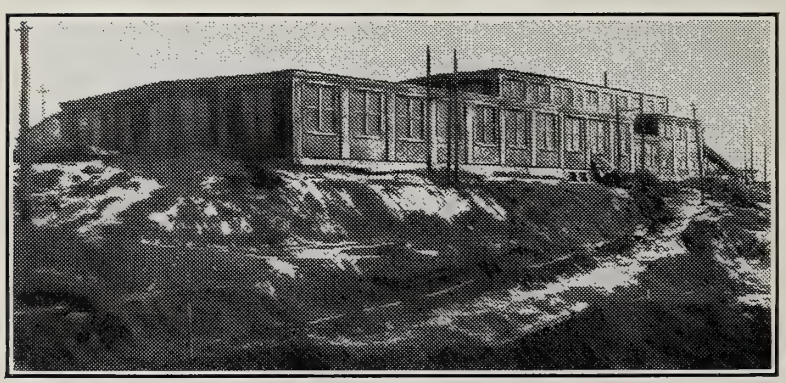
Tetrault Shoe Mfg., Co., Limited, Montreal

ALTHOUGH the beginning of 1921 found the boot and shoe industry in the worst period of depression, we do not expect that final readjustment will take place until the middle of 1922. Of course, the period of huge losses has been passed but prices of raw materials have not as yet, for many kinds of leather, reached a solid and uniform basis. Only when this happens and when labor is still further deflated will the industry be able to go ahead full steam.

Notwithstanding this, it is gratifying to find, for instance, that colored calf leathers have been reduced from $1.50 per foot to 45 cents and colored side leather from $1.00 to about 25 cents. Labor prices are still inflated and it will be absolutely necessary that, after the bulk of spring orders are delivered, a further reduction be made so that the wage scale shall be more in harmony with the reduced cost of living and the economic necessity of the industry.

On account of lack of stability in prices, buying has been very cautious during the whole year but for the last six months many factories have found it possible to average production at 75 per cent. of capacity. It

INDUSTRIAL DEVELOPMENTS OF 1921 ILLUSTRATED



Groundwood Mill Now in Operation

This addition to the plant of the Brompton Pulp & Paper Company, Limited, at East Angus, Quebec, consists of a two-storey grinder room, 126x62 feet, with an addition 84 x 15 feet along the west side, and a single storey screen room 168 x 85 feet. The mill commenced operations in August last.

seems that this year's prospects warrant at least as good business as during this last half-year.

Jobbers' and retailers stocks have been on the whole considerably reduced and are in a healthy state but the general financial situation is so bad, on account of so many other industries not being sufficiently deflated, that it makes it hard for the retail shoe trade. This end of the shoe business will now have to bear the brunt of the deflation which manufacturers and wholesalers have experienced during the past year and a half, but in general the shoe industry is in satisfactory condition and will soon be in a position to profit from any normal demand that may develop.

Leather

By Theodore King

The King Brothers Company of Whitby, Limited, Whitby

WE have had no trouble getting all the raw materials we have required. Quality has been kept up. As to prices, compared with a year ago, there has been no change and probably the market is a little higher. We consider that the bottom was reached a year ago in tanning materials.

Labor has been much easier and we have had no trouble getting all the help we require. Wages with us are the same as they were on January 1, 1921. Efficiency is better.

As to the finished article, demand started to improve during the year and has continued to do so. We believe that prices have struck bottom and that the process of deflation has been completed.

We have no doubt that freight rates and the high cost of labor are the principal things retarding business. If we can overcome this with satisfactory reductions in freight rates and labor, we have no doubt that the outlook for 1922 will be very bright.

Sheet Metal

By T. J. Storey

International Metal Works Limited, Brockville

THE market for our product has been very poor throughout the year. Being interested in the automobile business, we have suffered along with all others, although we think we have the right to look forward to an improvement in trade conditions in early part of 1922.

Our raw materials have come down in price to the extent of about 25 per cent. We have made no reduction in labor but have noted an improvement in efficiency.

We believe there is still room for further reductions in finished product and considerable more leveling to be done. It is almost impossible to look forward to the immediate future with optimism, yet we feel that, having come through two very trying years, consumers cannot continue buying much longer in hand to mouth fashion. They will wake up some morning to find a shortage along all lines.

Leather

By T. A. Craig

Wickett & Craig, Limited, Toronto

IN our opinion the general business situation is decidedly more healthy than it was a year ago. There was a steady decline throughout the first six months of 1921 in the price of raw materials but since that time there has been a gradual strengthening of the hide market and today hides are stronger than they have been for a long time. Tanning materials are higher in price than they were six months ago and it looks as if deflation in all the raw materials used by tanners was rather overdone.

Prices of our products have been gradually reduced throughout the year. But unless there is a substantial readjustment in wage rates, freight rates, and tax rates, any change hereafter must be to higher prices.

As to the outlook for 1922, we do not look for any great increase in volume of business but as all stocks of merchandise are low and no further deflation can be anticipated, there is no reason why there should not be a steady, healthy demand for goods. This we hope for and really expect.

Tool Manufacturing

By F. S. Laythe

Butterfield & Co., Rock Island, Que.

WE have found no difficulty in securing raw material. The supply has been ample, and the quality of the material we use considerably improved as compared with the years during the war. There has been no great reduction in prices. High grade carbon steel, of which we use a large quantity, has been reduced in price only very slightly. There have been several reductions made in the price of high speed steel, so that now, while still about 80% higher than it was in 1914, it is getting back to a more reasonable price.

The labor situation is not serious with us, and the cost as compared with last year shows some reduction, probably around 20%. We are of the opinion that there must still be greater reductions in labor before conditions can get back to normal. Our experience is that labor is more efficient than it was during the war period.

We have made several reductions on the tools we produce, during the year, but as the demand has not been brisk, we do not think that lower prices have stimulated demand, but we have felt that reductions had to come and we voluntarily reduced prices, without being requested, in the endeavor to meet the conditions. There is no improvement in the demand for our tools, in fact there has been a gradual slackening since about August.

Naturally there is a demand for lower prices all along the line. It seems to be the general feeling that the bottom has not been reached. We are inclined to think that in a large number of cases there cannot be any further reductions of consequence until raw material and labor reaches a lower level; then we think this will come about gradually, and we do not think that deflation has been entirely accomplished.

Generally speaking, the worst is over, and we trust that the year 1922 will show an improvement. We are not looking for any big jump in business the first of the year, but so far as we can estimate the situation, there should be an improvement soon after the first of January, and a gradual improvement thereafter. We are not expecting to see normal conditions in 1922, but we do expect to see business a great deal better, at least a 50% improvement by next fall.

Food Products

By E. D. McCafferty

H. J. Heinz Company, Leamington

QUALITY of raw materials during 1921 has been uniformly better, with a better disposition on the part of those supplying raw materials to give satisfaction. Supply is better, with more choice of supply. Prices are lower on most raw materials, there being few exceptions. Bottom must have been reached on some lines, because they are below the cost of production; on others, further declines are anticipated.

Labor is easier to obtain, and is more contented with its work. Wages are not much lower. The efficiency of labor has improved, but unemployment is a serious factor at this time. Labor is not as efficient as it was five years or more ago.

Our market has been maintained in increasing volume by improved quality and

INDUSTRIAL DEVELOPMENTS OF 1921 ILLUSTRATED



Refinery Extended During Past Year

The photograph shows the interior of the coppery refinery of the Consolidated Mining and Smelting Company of Canada, Limited, at Trail, British Columbia. Extensions made during the year comprised the installation of more tanks like those shown above, thus doubling the capacity of the plant.

harder work. The trend of prices is downward and we do not think deflation has been completed.

Transportation costs are a serious factor in general costs, because they affect everything going into the factory and everything going out. The wages of skilled and semi-skilled labor are still a serious factor, and we need relief from housing conditions. There seems to be a circle holding high labor costs, transportation, building costs and rent, which no one wants to be the first to break.

The worst is not over in Canada. It may be over in England and in U. S. A., but history shows that Canada does not go down as quickly, nor come up so quickly as the United States. Canada seems to be more conservative and responds more slowly to both actions. The features that tend to inspire hopefulness are the improving attitude of labor, the small reduction in transportation costs and, most of all, the fact that basically everything is all right.

Stoves and Furnaces

By C. A. Lusby

Amherst Foundry Co., Limited, Amherst, N.S.

IN regard to raw materials, we have had no difficulty whatever in getting supplies during the past year. The quality has been practically the same as we have been getting for some time. Prices of some of the commodities have dropped considerably, but I do not think the bottom has been reached yet in regard to all these materials. There has been a considerable reduction in many of the materials which we use, but the reduction has been very much greater in some cases than others. The reduction in pig iron during the year has not been very large, perhaps on an average of 10% or 15%. Coal is costing us still the same price as we paid a year ago. Sheet steel has fallen somewhat in price, perhaps 20% and many of the other articles from 15% to 25%.

We have had no difficulty whatever during the past year in securing all the help that we required. In fact we have not been able to take all the help that has been offered from time to time. We think that labor has decided that, as work is rather scarce and hard to get, it is advisable to be more prompt and give more faithful service than it has been doing during the few years previous to this. Wages have come down to some extent, but not as much as I feel they should have done under the existing conditions. I think about 20% would be the reduction from wages prevailing previous to this past year.

During the first half of this year markets for the goods which the Company manufacture were very poor indeed, but during the last half of the year, there was a very decided improvement and during the months of August, September and October business was fairly good with us. It of course has dropped now to practically nothing, but that is always the case at this season of the year with our business, as the goods which we make are not bought to any extent during the winter months.

There has been a considerable reduction in the price of the finished products, but I think probably there will be a further slight reduction in some of them. I do not think, however, that there can be much further reduction unless wages can be materially reduced.

The enormous freight rates which the railways have been charging, I think, have had a very detrimental effect on business. We, in the Maritime Provinces are particularly affected by this, as we do not get as favourable rates as are accorded to other parts of the country.

I feel from what I can see and hear that while the next three or four months will be very quiet in regard to business and probably there will be much stagnation in business after that we will see a decided improvement. Prices have been gradually getting down to a basis where there will probably not be much further reduction. One of the causes of depression in business during the past year, has been the fact, that people were looking for lower prices and did not purchase, as they would have done had they thought prices had reached their lowest level. Labor is more anxious for employment than it was and I hope will be more reasonable than it has been in the past.

Corsets

By E. W. Mills

The Crompton Corset Co., Limited, Toronto

WE have found conditions in the raw material market very much easier both as to supplies and prices. The quality is somewhat better than in 1920, as manufacturers are not so rushed and have more opportunity for inspecting their products. Deliveries have been very prompt, and we are having no trouble now in getting all the material we require. Prices are a great deal easier and we consider that the bottom has been reached as far as present conditions will allow. We do not see how it is possible to make any great reduction.

The employment situation is also very much easier as we are able to procure more experienced operators, but owing to the class of operators which we employ wages have not been lowered to any great extent. Good operators in our line can at all times make good money, but the commoner class find it very hard to keep up with the rate of a year ago.

The market for our product is in a very healthy condition just at present, as the public have become accustomed to paying a higher price than they did a few years ago. We have endeavored to keep our product up to the standard by giving them better qualities, rather than reducing prices, and have found it work out in a very satisfactory manner. We are kept fairly busy, and the prospect for the spring seems to be very bright.

In regard to prospects for 1922 we consider them fairly good, but are looking for a rather quiet time until the spring business gets well under way. We see no reason for believing that trade will be anything but up to the standard, as our advance orders are quite up to the usual in quantity, and they are more than above the average in regard to quality.

Boots and Shoes

By Clayton E. Hurlbut

The Hurlbut Co., Limited, Preston

WHILE the supply of raw materials has been fair, the quality of calf skins, sheep skins and patent leather has been quite inferior to that purchased two years ago. It has been much harder to get the high grade qualities which we require for our particular line.

Conditions of employment and wages are the same as last year. We believe though, that the efficiency has improved somewhat.

We have had an exceptional demand for Hurlbut welt shoes and have a great many orders on hand at the present time. We expect that our sales will amount to what they did last year, although the price has receded about 30%.

Prices are about 30% to 35% lower than they were last year and we believe that they have reached the bottom at least for some considerable time.

If the tariff is maintained, we believe the outlook for 1922 exceptionally good.

INDUSTRIAL DEVELOPMENTS OF 1921 ILLUSTRATED



Large Wagon Plant at Chatham, Ontario

The illustration shows the plant of the International Harvester Company of Canada, Limited, at Chatham. This has been used for some time for the manufacture of wagons and during the year the company decided to commence the manufacture of trucks there. Formerly the International trucks were made in the United States and shipped into Canada, but business has increased to such an extent as to render a Canadian plant advisable.

More Reports on Conditions in Our Export Markets

Information from reliable overseas correspondents about state of trade in various countries of the world.

Continued from January Issue

ONE of the features of the January issue was a series of reports on business conditions in several of the nearer export markets, such as the United States, West Indies, South America, Great Britain and France. These were specially prepared for INDUSTRIAL CANADA by correspondents, mainly bankers, who were in close touch with the financial and business situation in each country. It is now our privilege to be able to supplement these earlier reports with later ones received from more distant parts. Owing to the length of time necessary for correspondence to pass between these countries and Canada, it was unfortunately impossible to include these in the January issue. It is hoped, however, that the information they contain will be carefully noted by all our readers who are interested in export trade.

New Zealand

By Th. de Schryver

Auckland, New Zealand

THE outlook for 1922 is very encouraging and all indications are towards a return to normal. This naturally does does not mean a return to the boom times of 1919-1920, or a return to pre-war conditions. The total trade will balance between the figures of 1914 and 1919, and, while prices will be considerably lower than in the latter year, they will be far above those of 1914.

Steel products seem to be more unsteady than other manufactured lines; of the latter some show a tendency to advance. New Zealand, with its regular seasons and the heavy increase in land cultivation, is probably better situated than any other country. Butter prices are steadily dropping, but the production has so enormously increased that the decline in price will easily be made good.

Wool now brings prices, which are payable to the producer, and if the old speculative stocks have been disposed of, the situation should become quite normal.

Meat and meat products are not in so favourable a condition—more or less owing to the army stocks still held in England. Hides and skins are showing an upward tendency.

There are large public works in sight, amongst others the installation of large Hydro electric plants in the centre of the North Island.

The building trade on private and public account is improving rapidly owing to the drop in prices of materials.

Unemployment which at no time was very serious will disappear. The outlook is much brighter than at the close of 1920 and 1922 should prove to be a very good average year.

Prices of commodities are only very slowly falling. The peak was reached in December 1920, when average prices registered 80% above pre-war level; on the 31st of October 1921 prices had dropped to 56% above 1914 level. The new tariff does not favour further reductions, at least nor for imported articles.

Wholesale prices have fallen far more precipitately than retail prices, and most of the wholesale houses are heavy losers. Stocks in general are very low, particularly in the textile branches, which is partly due to the uncertainty of the new tariff schedule. Now the tariff has been fixed, buying should commence again in the latter end of January.

December is always a weak month in this respect as many firms take stock during this month and also owing to the holiday season. All wholesale firms throughout the Dominion close from the 24th of December until 4th of January inclusive.

Money is getting decidedly easier, and the attitude of the banks is more hopeful than for some time past. The discount rate has been reduced to 6%, and probably will be reduced soon by another percent. Three month's letters of credit can be obtained by reputable firms for fairly large amounts.

Sight letters of credit are also issued, though for more limited amounts. Causes of the now rapidly passing depression are principally the reckless expenditure by the people, on luxuries during a period of unprecedented prosperity, and the acknowledged wastefulness of the Government.

To give some idea of the magnitude of waste by the public, I need only mention that during 1920 no less than 11,995 motor vehicles were imported, mostly of the luxury variety. Of these 7,448 came from the United States, 3,852 from Canada, and 615 from the United Kingdom, the remainder from other countries.

Besides this, 2,666 motor cycles were imported. The total amount spent on these vehicles' parts and fuel came to no less than £7,106,050. This is exclusive of duty. The sum total is computed at £9,000,000 a formidable sum for a population of 1¼ million.

The general public seems to be in possession of plenty of cash for pleasure and amusement. As another example to prove this, I give the following news item from one of the papers. In an advertisement in the New Zealand "Herald" a party intending to make a 6 months' cruise amongst the South Sea Islands, asked for a gentleman to join, willing to contribute £250 towards the expenses; not less than 700 applications were received.

The country's revenue has fallen off considerably during the seven months after the 31st. March 1920. Customs are responsible for this shrinkage by £1,929,514; stamp and death duties, £110,803; income tax, £79,132. The total revenue and expenditure is set down as follows:

	1921	1920
Revenue	£11,413,498	£13,677,972
Expenditure:		
Permanent	6,656,239	7,690,000
Annual	9,103,918	7,330,627
Total	£15,760,157	£14,331,317
Excess expenditure	4,346,659	653,345

It is a matter of congratulation that export figures are keeping up, notwithstanding the enormous fall in prices. The total exports of produce during the 12 months ended 31st October amounted to L46,000,504, against £45,680,680 in the same period of 1920. Against this, imports have declined from £61,595,828 to L49,565,896. They still show an excess of 3½ million as compared with exports but if the last 6 months are taken into consideration only, there is a considerable reduction in imports as compared with exports. The excessive importation took place in the first half of the year.

Though there is unemployment, the position is not serious and very soon public works and the farmer will absorb any hands out of work. In some parts ill-advised coal miners have gone out on strike. As the country is full of imported coal, mine owners are rather pleased with the men's folly. It will allow dealers to get rid of their surplus coal at not too great a loss. While writing this, many of the miners have returned to work, sadder but wiser men.

Australia

By A. McArthur

Coogee, New South Wales, Australia

IMPORTS from all countries into Australia have fallen considerably. This is due to the unsettled state of finance, and also to large stocks being forced on Australian houses that were ordered during the war. The exports have also fallen somewhat as a result of foreign exchange, Australia preferring to keep the wool under a government pool, likewise the wheat, rather than accept payment other than in sterling or equivalent; in addition, the rural industries have not provided for the return of the soldiers to the extent they should have done.

Commodity prices have reached during the last 18 months abnormal values, but are now day by day becoming more easy.

At the present time there is a big fight in progress between the socialistic parliament of the State, supported by the extremists from the Trades Hall, and the employers regarding the basic wage and shorter hours in this and other states. The federal government is also causing much unrest on account of its interference with private enterprise, especially regarding shipping and ship building, and generally is not living within its income. It is only carrying on by one of a majority from day to day, there being three parties in the House, namely National in power, Country Party and Labor. I predict a very drastic change at the next election of both state and federal parliaments.

Unemployment is rife, caused, as explained, by the demand for a basic wage, and shorter hours. Many of our industries, that came into being during the war, are not in a position to pay higher wages for shorter hours. This also refers to old-established industries, and not being able under the conditions demanded to compete with the outside world, business generally is of rather a panicky nature.

Stocks are gradually decreasing but, with the heavy volume held, reduction of stocks will take some little time, although owing to bank pressure to relieve overdrafts, considerable stocks of all descriptions are being sold below cost, and the liquidation of many stable concerns is taking place every day.

The financial situation is at present strained and money is difficult to obtain at good interest on gilt edge securities. The banks are very difficult to approach on any proposition and short loans even on real estate are hard to obtain. In fact the banks in my opinion are trying to make both government and private individuals live within their means, which will have the effect of stabilizing finance quickly.

I do not anticipate any bright outlook for the early part of 1922, but consider the position will gradually improve about the middle of the year, as the merchant will then have disposed of much of his high cost stock. The wool clip and harvest will be reaped; the basic wage and shorter hour agitation will then disappear through unemployment; there will be elections and alterations of Parliament; and exchange will be more to normal.

In conclusion I must point out to you as I have already done to others, during my visit to Canada, that there is a good field for Canadian goods here, but, as both Australia and Canada belong to the same Empire, we resent the exchange rates. Preference would be extended to Canadian firms before any other country, except Great Britain, if this could be overcome, and I am then sure public opinion would force the Government to regulate the Custom's duties on Canadian goods at a purely British preference rate. The American idea of exchange, cash against documents in dollars, does not appeal to the average Australian, nor does it inspire good feeling regarding trade.

South Africa

Monthly Trade Report

The National Bank of South Africa Limited, Cape Town

THE position with regard to trade generally has not altered at this date (November 30, 1921). Though there has been no actual set-back, it is impossible to record any definite progress. Nor is the immediate financial outlook exactly encouraging. South Africa, though in many respects more favourably situated than many countries who emerged from the war period burdened with heavy debts, has its own peculiar difficulties with which to cope. The gold mining industry, upon which so much depends, is faced with a certain reduction in the premium on gold and, possibly with its ultimate disappearance. The efforts now being made to place the industry on a sounder footing will require to be attended with a very real measure of success—so far as concerns greater efficiency combined with reduced working costs—before the spectacle of a falling premium can be regarded with less anxiety. The industrial atmosphere too will have to be clearer if complete confidence in the country is to be established abroad.

Continued stagnation in the diamond market has led to a cessation of production for the time being, with attendant serious loss of revenue to the country and curtailment of the spending power of those who depend upon this industry for a living.

Railway revenue remains unsatisfactory and is not yet balancing expenditure, working for the six months ended September having resulted in a loss of a million pounds, over and above the accumulated deficit of 2½ millions as at the end of March last.

Total importations of merchandise for the nine months ended September are 28½ millions lower than during the corresponding 1920 period—a falling off of 41 per cent. Notable decreases are soft goods including boots and shoes, practically 12¾ millions (or 56 per cent.) less, food and drink practically seven millions (65 per cent.) less, motor cars 1½ millions (77 per cent.) less, iron and steel manufacturers nearly 1½ millions (46 per cent.) less, hardware and cutlery over a million (40 per cent.) less and wood and timber slightly over a million (48 %) less.

Imports of manufacturing and of mining machinery show increases of 52 and 75 per cent. respectively. Total machinery imports (not including locomotives and agricultural machinery) were valued at £3,845,000 as compared with £2,874,000 in the 1920 period.

Of our total requirements the United Kingdom has supplied 53.9 per cent., the Dominions and Possessions 10.2 per cent., and foreign countries 35.9 per cent. as compared with 55.1, 12.1 and 32.8 per cent. respectively last year. The United States of America sent us goods to the value of 6¾ millions—as against 11¼ millions during the first three quarters of last year—representing 16.6 and 16.4 per cent. respectively of our total imports.

The bulk of our exports was taken, as usual, by the United Kingdom, to whom we shipped 36¼ millions worth of goods or 78.1 per cent. of our total exports. Foreign countries took just under 7 millions which represents a 15 per cent. proportion of total exports, our foremost customers in this field being the United States with slightly under two millions (4.2 per cent. of total), and Germany, a little over 1½ millions (3.6% proportion of total).

Exports are nearly 21½ millions lower than in the 1920 period, the principal contributing declines being—as during preceeding months—wool, diamonds and hides and skins, with decreases of ten, eight and three millions respectively. As regards volume, wool and mohair shipments over the period just ended are heavier by roughly 42 and 7 million lbs. respectively; whilst hides and skins are approximately 16½ million lbs. lower. Food and drink exports display an improved value of a little over 2½ millions (an increase of nearly 108 per cent.) maize, sugar and fruit shipments showing satisfactory increases of 1¾ millions, £672,000 and £283,000 respectively. Merchandise to the value of £2,893,000 was shipped as ships' stores during the period.

Shipping figures showing overseas tonnage landed and shipped at Union ports during the nine months, give a decrease of 516,838 tons landed and an increase of 685,373 tons shipped.

Argentina

By the British Consul

Buenos Aires, Argentine Republic

ALTHOUGH there is no prospect of an improvement in the commercial situation in Agentina, yet there is every reason from past experience and existing conditions to indicate that the present depression is temporary and will be followed by a return to prosperity. The two principal grounds for this conclusion are the undoubted economic strength of the country itself and the evident tendency of foreign trade to adust itself to the new conditions. The economic strength of Argentina is represented by abundant stocks of food stuffs and raw materials, which are needed by the principal consuming countries, by a sound currency which has not been affected by inflation, by comparatively light taxation, and by no indications, so far as can be seen at present, that the production and exportable surplus of her many staples will suffer in diminution during the forthcoming crop season. In regard to the adjustment of foreign trade, excessive stocks are in process of liquidation and re-shipment, the premium of 50 per cent, on United States exchange is an equivalent premium on exports to that country and a restriction of imports of merchandise to minimum requirements, whilst importers have had sufficient experience of the vagaries of losses on exchange to be alive to the necessity of avoiding further speculation.

The Argentine market maintains its preference for British goods and British methods. This preference is based on experience, quality of goods, investment of capital, and reciprocity of trade. It is expressed as follows by an Argentine economist:—

> "The recovery of the United Kingdom is evident from commercial statistics and justifies the conjecture that the British will resume the first place in Argentine commerce which they held uninterruptedly for so many years. The conclusion is strengthened by past experience of British commerce, which was always characterised by fair and unequiveocal dealings and always appreciated in Argentine commercial circles for the worth and excellence of its products."

From long experience of trade with Argentine, British exporters and local British houses have become familiar with Argentine requirements and with the best methods of doing business, and they have found in Argentine merchants a readiness to assimilate British Business Ideas. The strongest features of the British trade connection with Argentina are the large number of enterprises established by British capital and of British firms engaged in business in the country, the representation of British manufacturers by local agents who cover practically the whole field of British industry, and finally the constant interchange of visits which these mutual interest entail. Both German competition before the war and American competition during and after the war confirmed the general soundness of British methods. The advice applicable is, therefore, that these methods should be constantly developed and perfected and that new firms entering the market should study and copy them. It would be misleading, however, to give the impression that the preference for British goods and the established position of British trade are in themselves sufficient to secure orders. These advantages are subordinate to the vital factor of competitive prices, but even where British prices can compete with those of foreign merchandise the advantages would be dissipated by inactivity; it is necessary to maintain them by enterprise and constant vigilance. Buenos Aires is a keen international market place where the products of all manufacturing countries are offered on the spot by competent representatives. Argentine buyers, or rather the buyers of the Buenos Aires importing firms of all nationalities, for the Argentine themselves are not much addicted to trade, are well posted on the values of merchandise, as they can compare qualities and prices offered from the United Kingdom, France, Germany, Italy, Spain, United States and even Japan. The buyer visiting Europe does not, like the Colonial buyer, go direct to the United Kingdom, but probably makes his headquarters at Paris as a convenient centre from which to visit Spain, Italy, Germany, and the United Kingdom. The only serious competition to British trade in the Argentine has been, since the outbreak of war, from the United States and recently from Germany. The anticipated capture of a large trade by Japan has not materialized.

China

By George E. Sokolsky

Bureau of Economic Information, Republic of China, Shanghai

IT would be hardly possible to give any comprehensive statement of the foreign trade situation including imports and exports for the year 1921 before the year draws to a close. However, the foreign trade conditions for 1920 as compared with 1919 may perhaps be of interest.

The summary of the trade conditions for 1920 given by the Customs Report reads in part as follows:—

"The year opened with the greatest trade boom ever known, and the unprecedented high exchange ruling during the first two months of the year gave rise to wild optimism, which found vent in reckless buying from abroad far beyond the possible limits of consumption. Over-speculation and over-trading ensued to a formidable degree. Next in chronological order came the sudden and

unexpected break in exchange, which fell steadily from 9s 3d on the 12th February to 3s 11d on the 22nd December and found the majority of interested parties with their commitments unsettled. This coincided with a general business depression in several of the principal industrial countries of the world, which developed into a world-wide trade slump encompassing the principal industries and causing the wholesale prices of most commodities to give way to such an extent that it more than offset the advantages offered by a falling exchange to the China export market. The position was, moreover, aggravated by the presence of huge unsaleable quantities of Chinese products held in stock in Europe, which further depressed prices; while in China, the unsettled state of the Country and the famine devastating five rich provinces adversely affected exports as well as imports. At the close of the year a general deadlock ensued, leaving trade practically at a standstill in most centres and showing, as the year's financial results, only small gains for a few and substantial losses for the majority, Chinese and foreign merchants alike."

The net value of the direct foreign trade of China for 1919 in merchandise, excluding treasure, totalled 1,277,807,800 HK. taels. The total imports valued at 646,998,000 HK. taels and the total exports valued at 630,809,000 Hk. taels.

The net value of the direct foreign trade of China for 1920 in merchandise, excluding treasure, totalled 1,303,881,530 Hk. taels. The total net imports valued at 762,250,230 Hk. taels, and exports to the value of 541,631,300 Hk. taels.

The following table gives the comparison of the values of the exports to and imports from the principal countries for the years 1919 and 1920:—(unit in: housands of Hk. taels.)

Country	Imports		Exports	
	1919	1920	1919	1920
Hongkong	153,632	159,313	131,495	136,462
Macao	5,053	9,839	4,711	4,737
Singapore, Strts, etc.	10,116	7,803	11,221	16,539
Dutch Indies	6,864	10,565	3,072	4,027
British India	26,981	32,494	9,599	8,758
Germany	....	5,118	164	1,761
Netherlands	111	3,757	1,759	10,565
Belgium	229	1,970	3,987	3,273
France	3,376	4,879	34,286	21,016
Italy	992	342	5,144	5,518
Russia and Siberia	14,061	9,625	21,322	14,481
Korea	9,131	10,314	22,618	23,316
Japan (incl. Formosa)	246,941	229,136	195,006	141,928
Canada	18,888	20,182	4,181	1,039
U. S. A. (incl. Hawaii)	100,237	143,199	101,119	67,112
Other countries	8,326	16,401	23,936	35,264
Total	679,530	799,960	630,809	541,631
Less re-exports	32,532	37,710		
Net Total	646,998	762,250	630,809	541,631

Commodity prices still average high. The wholesale price index number at Shanghai based on 100 in September 1919, was 108.6 in November 1921. In the interval it has experienced two pronounced rises. From a low of 97.0 in December, 1919, it rose steadily to 109.9 in June 1920. Receding, it dropped to 103.9 in January, 1921 but rose again to a height of 111.9 in August.

The cost of labor is on the constant rise. During the past three years strikes have taken place in many of the industries requiring skilled labor and in some instances in those requiring unskilled industries. A few instances of strikes and the demands of the laborers are herewith given:

November 30, 1921, Foreign Style Furniture Carpenters demand 10% increase.

June 15, 1921, Carpenters in Shanghai demand 40 cents per day; apprentices 25 cents per day.

October 1, 1921, Printers in Shanghai demand 20% increase.

June 9, 1921, Canton mechanics demand increase in wages; decrease in hours.

These are a few typical instances selected at random.

Except in famine and drought districts there is no unemployment problem at present in China.

Wholesale stocks are slowly decreasing. Figures are unavailable.

There have been heavy fluctuations throughout the year in the rate of interest on loans. The average weekly interest rate of all Shanghai banks was about 11 per cent. at the first of the year. It fell off to 1 per cent. in February and held around 2 per cent. until July, when it again shot up to 11 per cent. Receding somewhat in August and September, it advanced sharply in October and at the end of the month was approximately 25%

The investigator discussed the question of outlook with the financial editor of the Shanghai Journal of Commerce, Mr. Paine Ken-son, who gave his opinion as follows:

"The year 1920 was one of economic reaction after the war. Native products piled up and the purchasing power of the community became weak. And with the decrease of the market value of silver and unfavourable international exchange, the import merchants found that goods stagnated, which was further aggravated by the rise of prices. Then the year witnessed the great famine of the North and disturbances between the South and the North. The financial crisis which resulted may be illustrated by the fact the 1/3 of the piece-goods dealers closed down in Shanghai and the demand for the cancellation of former orders of piece-goods was very large.

"During the year 1921, the crisis did not entirely subside. Bankers have been very careful in making loans. Merchants of different businesses not only could not obtain sufficient credit but were also affected by political conditions. And with the bad harvest, markets in different parts of the country became depresssd. Since legitimate trade has not been prosperous and there has been too much floating capital, speculation became general. There can be no optimistic outlook for the trade of 1922. The reasons are:

"(a) The prosperity of speculative enterprises. At present, Beking, Tientsin, Harbin, Tsinan, Hankow, Nanking, Chinkiang, Soochow, Sunkiang, Kiahsin, Hangchow, Shaohsin, Ningpo, Swatow, Kwanchow, etc., have established many stock and produce exchanges. And yet the central place of trade is in Shanghai. Shanghai has more than 140 stock and produce exchanges. The likelihood is that many of these exchanges will fail.

"(b) The bad harvest. This year, excessive rain and heavy storms in the provinces of Chekiang and Kiangsu affected crops like rice, wheat and cotton which yielded only poor percentages. As to Hupeh, Honan, Szechuen, Yunnan, Kweichow, and Kwangtung, the farmers became scattered as the result of civil war. The farms remained uncultivated. As to places along the Yellow River basin, the people still cannot recover their former conditions after the great drought of last year. Explained by these phenomena, the purchasing power of the people of the interior may not be increased as compared with this year.

"(c) The High Cost of commodities. In April and May of last year, the prices of commodities of different countries were considerably increased. Yet China, with its silver currency, was the only country with higher prices which is evidenced by the price index numbers. I certainly believe that prices next year cannot fall below 100."

France

By W. H. Dorey

Hon. Secretary, Canadian Section, British Chamber of Commerce, Paris.

THIS winter has been unfavorable for business in France, but I am of the opinion that in the spring will come a distinct turn for the better and that France will regain in a very large measure her old-time prosperity.

The financial situation is distinctly favorable, deposits in banks and savings banks being on the increase. The following figures from the National Savings Bank show that the proverbial French "woollen stocking" is on the increase:—

Year	No. of Account	Savings
1913	15,066,000	Frs. 5,829,000,000
1920	15,738,000	Frs. 8,148,000,000

The following is a comparative statement of French imports and exports for the first nine months of 1921 and the year, 1920:—

IMPORTS
(Weight in Metric Tons)

	9 months 1921	12 months 1920
Foodstuffs	2,774,294	6,164,573
Articles necessary to Industry	20,927,867	42,321,629
Manufactured Articles	1,104,020	2,453,417
	24,806,681	50,939,619

EXPORTS
(Weight in Metric Tons)

Foodstuffs	892,377	1,262,508
Articles necessary to Industry	8,357,235	1,836,925
Manufactured Articles	1,461,097	9,324,672
	10,710,709	12,424,105

IMPORTS
(Value in 1000 francs)

Foodstuffs	4,170,124	8,618,155
Articles necessary to Industry	7,903,907	16,800,548
Manufactured Articles	3,759,497	9,986,248
	15,833,528	35,404,951

EXPORTS
(Value in 1000 francs)

Foodstuffs	1,383,157	2,211,323
Articles necessary to Industry	4,047,880	14,252,907
Manufactured Articles	9,581,940	4,772,124
	15,012,997	21,236,354

Services which the Various Departments of the Association can render to the Members

AT its head office in Toronto, the Canadian Manufacturers' Association maintains a number of departments, which have been organized for the purpose of giving expert assistance to members in the handling of the various problems which arise from time to time in the administration of their businesses. The services rendered by these departments cover a very wide field and have been found of great value by those who have made use of them. Members are entitled to the benefit of these services at all times without charge and are urged to take the utmost advantage of them. It will be found that, if this is done systematically, the value of the membership fees paid will be returned many times over in the course of the year. For the benefit of those who may not be familiar with the various departmental services, an outline of the more important ones is given below. It is recommended that these be carefully noted and utilized wherever possible.

The Legal Department

Examines bills introduced into the House of Commons or the Provincial Legislatures.

Always available for information regarding the laws of the various Provinces as they affect the transaction of business.

Commercial Intelligence Department

Furnishes lists of articles made in Canada and firms making them.

Furnishes information in regard to raw materials.

Conducts commercial surveys to find the extent of the Canadian market for new products.

Advises in regard to agencies and export connections.

Translates foreign correspondence.

Gives trade information in regard to foreign countries.

Revises the "Canadian Trade Index".

Supplies commercial reports on foreign firms.

Reviews and correlates work of Export Clubs.

Maintains close relations with Department of Trade and Commerce and officials and business men in various parts of the world.

Reviews new financial and industrial movements.

Trade Sections Department

Supplies a secretarial service for sections or groups of members engaged in similar lines of production whose common interests warrant periodical conferences.

Tariff Department

Advises on all Canadian Customs Tariff matters.

Gives information in regard to tariffs and invoice requirements of other countries.

Prepares statements relating to tariff matters.

Advises on Customs drawback and refund claims.

Advises on Sales Tax matters.

Insurance Department

Examines Insurance policies.

Advises re wording of policies.

Advises re standing of Insurance Companies.

Quotes Insurance rates.

Advises re sprinkler rates.

Gives suggestions re construction.

Publishing Department

Serves the members through the monthly publication of INDUSTRIAL CANADA, which conveys valuable information about the work of the Association and its various divisions, departments and committees.

Also publishes *The Canadian Trade Index*, listing all Canadian manufacturers and their products.

Industrial Relations Department

Gives information as to prevailing wage rates, hours of work, etc.

Gives information as to cost of living.

Advises on all Workmen's Compensation matters.

Advises on all questions arising under Minimum Wage Act Factories Act, etc.

Gives information on all Works Councils questions.

Gives information and advice on Labour Agreements.

Transportation Department

Adjusts freight charges.

Interprets classifications.

Explains tariffs and regulations.

Handles freight claims.

Gives information on switching and interswitching charges.

Explains baggage regulations.

Advises re cartage charges and demurrage rates.

Investigates delays to freight in transit.

Gives information in regard to ocean and inland water transport.

Take advantage of your Membership Privileges by making use of the above Services.

News and Views of the Association

There will be found each month in this department a record of the various activities of the Canadian Manufacturers Association during the preceding month. The information is supplied to INDUSTRIAL CANADA officially, and all members of the Association are urged to acquire the habit of reading and checking over the contents of the department carefully in order to keep themselves posted on the work of the Association

January Meeting of the Executive Council

Date and Place of Annual Meeting announced at large meeting of Council at Hamilton.

AN exceptionally large attendance of members was present at the January meeting of the Executive Council, held in the Royal Connaught Hotel, Hamilton, on the afternoon of Thursday, January 19. The president, W. S. Fisher, St. John, N. B., was in the chair and among those present were John R. Shaw, first vice-president; C. Howard Smith, second vice-president; J. S. McKinnon, S. R. Parsons, Robert Hobson and Cyrus A. Birge, past presidents.

The Annual Meeting

The report of the Executive Committee, presented by the General Secretary, contained the definite announcement that St. Andrew's-by-the-Sea, N. B. would be the place of meeting for the 1922 convention and that this would take place on June 20, 21 and 22. Following the meeting an excursion will be arranged, which will probably take in St. John, Halifax, Sydney, New Glasgow, Truro, Amherst and Moncton, enabling the delegates to visit a large part of the Maritime Provinces.

Membership Standing

The Executive Committee, reporting on membership work for the first nine months of the fiscal year, stated that a gain of seven members had been made. The summary of applications and resignations by divisions was as follows:—

Division	Applications	Resignations	Change
Ontario	131	140	— 9
Quebec	42	61	—19
Prairie	73	41	+32
British Columbia	35	24	+11
Maritime	13	21	— 8
	294	287	+ 7

Under present trade conditions, the Association was fortunate in getting 294 new members during the nine months, but the resignations were heavy, leaving the net gain very small. An analysis of the causes of the resignations shows,—

Out of business or in liquidation	117
Struck off for non-payment of fees	56
Amalgamations	21
Dropped manufacturing end of business	32
Other causes	61

From this analysis it is apparent that of 287 resignations, 226 could not possibly have been prevented.

Tariff Committee

The report of the Tariff Committee dealt with a number of matters of importance to the membership, including sales tax, marking of goods act and customs decisions. On the subject of the certificate of value and origin approved by the Imperial Customs Conference for adoption throughout the British Overseas Dominions, the report said,—

"Attention is directed to Paragraph 4 of the certificate of value which requires the exporter to show the amount of drawback which he will receive from the Government in respect of goods he is exporting. This paragraph reads as follows:—

> "That the said domestic value includes any duty leviable in respect of the goods before they are delivered for home consumption, and that on exportation a drawback or remission of duty amounting to has been (will be) allowed by the revenue authorities in the country of exportation."

"The certificate has been adopted by Trinidad and certain other islands in the West Indies and some of the Association's members who are exporting, state that it is an objectionable clause and that in their opinion it is a handicap on export trade. The matter has been taken up with the Federation of British Industries, the British Empire Producers Organization and Canadian Chamber of Commerce, London, England, in order to ascertain the views of British manufacturers, as their interests should be identical with those of Canadian manufacturers."

Transportation Committee

A lengthy report covering several subjects of interest to transportation managers was presented by the General Manager. This material will be found in the Transportation Department on page 74.

Commercial Intelligence

An interesting report on the activities of export clubs was presented by the Commercial Intelligence Committee. It was explained that work of organizing and doing executive work in connection with these clubs had engrossed a good deal of the time of members of the staff of the Commercial Intelligence Department.

"Clubs directly under the auspices of the C. M. A. have been organized in Toronto, Vancouver and Montreal, and a great deal of credit is due to the secretaries of the divisions for their co-operation. An outline of organization, followed in all except one particular, was supplied to the organizers of a club for Central Ontario with headquarters in London which meets at Brantford, London, and Windsor alternately. The question of affiliation of the latter club is not yet settled, but, as it is composed largely of members of this Association, it is anticipated that one or two personal interviews will readily settle that question.

"Monthly meetings of the Toronto Club are held, the attendance varying from 40 to 125. The following indicate the type of speakers addressing the Club: Superintendents of the Foreign Departments of the Royal Bank of Canada and Canadian Bank of Commerce; Canadian Trade Commissioners; three Canadian business men with special export experience; Manager of Marine Insurance Company; and Professor of Economics. The subjects dealt with have been:—

- General financial conditions in export markets.
- Financial and business conditions in South America.
- Markets for Canadian products in Cuba and Central America.
- The development of an export department.
- The use of Parcel Post in export trade.
- The uses of marine insurance,
- Peculiarities of the Chinese market.
- Round table discussion on immediate prospects for export trade.

"The Vancouver Club has completed its organization, but owing to the absence of three or four of the most energetic members, the secretary advises that it was felt preferable to postpone regular meetings until about the first of March. In the meantime the secretary is keeping in close touch with the Head Office and pays close personal attention to the export questions arising in his Division and in this regard he is fortunately situated since he can readily reach practically all the interested members by personal contact without much loss of time.

"The Central Ontario Club has held meetings in London, Brantford and Windsor so far, and has had addresses from trade commissioners and Canadian business men on their return from export markets.

"In Montreal and District a series of organization meetings were held at which there was considerable discussion regarding the Constitution and membership. At one preliminary meeting the Director of the Commercial Intelligence Service of the Department of Trade and Commerce and one of the trade commissioners outlined a number of essential phases of export work and explained the services that the Government Commercial Intelligence Service could offer to manufacturers seeking export information. The organization committee's work culminated in a dinner meeting held last week at which about 300 people attended. Hon. J. A. Robb, the new Minister of Trade and Commerce, gave a general outline of the policy of the Department and S. R. Parsons gave an address on general business conditions arising from his observations, in Europe, and a brief report on the work of the International Labour Conference at Geneva.

"The Canadian National Export Club is the means by which the local clubs are connected with the Canadian Manufacturers' Association through membership. It acts as a

clearing house for information, supervises the preparation of articles in INDUSTRIAL CANADA, bulletins, pamphlets, etc., and keeps in touch with the C. M. A. Departments on all subjects of mutual interest. Through the local clubs and National Club four to ten pages of printed matter bearing on export questions are supplied or arranged for INDUSTRIAL CANADA each month. This material consists of trade enquiries, reports of meetings, extracts from valuable addresses, articles from authoritative sources on Canada's export possibilities in British and foreign countries.

"The National Club issues bulletins from time to time conveying to members information of a more intimate character than can be used in INDUSTRIAL CANADA, making special note of points readily overlooked by members.

"Booklets comprising valuable articles or reports previously issued in INDUSTRIAL CANADA are compiled and issued to the members. So far there have been issued a general review of export trade conditions in the British West Indies and South America.

"Another serious question that is fully dealt with is that of anti-Canadian propaganda appearing in publications issued in some of Canada's export markets. We have recently handled questions of this kind for the Barbados and New Zealand.

"The secretaries of the clubs are all, except in the case of the London Club, officials of the C. M. A. They interview foreign merchants and agents visiting Canada and put them in touch with Canadian manufacturers who may be seeking export information or connections.

"The meetings of the clubs have been found to be a source of strength to individual members of the Clubs and the Association in that they give rise to constant friendly interchange of information. From time to time subjects are brought up that require the attention of other special departments of the C. M. A. Some of these that are now under discussion are:—

Equalization of Freight Rates to the Orient,

Examination of the Comparative value of the Parcel Post with and without insurance,

Marine Insurance Rates.

"All of these, after further discussion by committees of the club, will be passed on for review by the proper departments in the C. M. A. In this way there are many points brought to the attention of the departments that might not otherwise arise, and thus a greater number of members are being interested in C. M. A. work and additional service being rendered to them. It is one of the objects of the Canadian National Export Club to correlate and harmonize the activities of the local clubs and to insure the proper disposal of the business that arises which can be handled by the C. M. A."

Insurance Committee

The Insurance Committee reported progress to date made by the Select Committee of the Ontario Legislature, which is drafting the new Ontario Insurance Act. The Association is being represented at all hearings by the manager of the Insurance Department and a representative of the Legal Department.

"The parts of the act dealing with accident and sickness insurance and with automobile insurance were approved with very slight revision. At the suggestion of the representative of the Ontario Motor League, a clause was included in the automobile section providing that no insurance company shall issue a policy of automobile insurance except on receipt of an application in writing signed by the insured. The section dealing with the licensing of agents and brokers was discussed very fully and a good deal of opposition developed on the part of both the insurance companies and agents. The Superintendent of Insurance for Ontario was instructed to revise this part of the act and we understand that the provisions, so far as licensing is concerned, will not differ very greatly from the act already in force. The Committee did not get as far as the paragraph which prohibits licensed brokers from placing insurance with unlicensed companies until the licensed market has been entirely filled. The various paragraphs of this part will, after revision, be taken up in detail by the Committee, and the Association will have an opportunity of suggesting amendments necessary to this paragraph. Although the draft act does not contain any reference to agents' commissions, the Committee, on special instruction from the Attorney General, set aside a day for the discussion of this subject, in the hope that some scheme might be arrived at whereby the cost of insurance could to some extent be reduced by a reduction in agents' commissions. Following the instructions of the Executive Council last year, the representative of the Association expressed disapproval of any statutory limitation of remuneration paid for services rendered. The hearings of the Special Committee will be resumed on January 23rd."

Industrial Relations

Reporting on the unemployment situation, the Industrial Relations Committee declared that this was still bad, particularly in the Middle West and British Columbia. It was satisfactory to note, however, that there had been a marked absence of serious disturbance or rioting. This was in no small degree due to the good work, which was being done by the Employment Service Bureaux, of which there were now 75, controlled by the central office at Ottawa. In addition to placing applicants in jobs, these bureaux acted as a check on the amount of unemployment relief as no one could get government relief without a certificate from a bureau (1) that work had been unsuccessfully sought and (2) that there was a genuine need of relief.

The Committee also directed attention to the programme of organized labor at the coming session of provincial legislatures. In Ontario and Manitoba, the following new legislation will be passed for,—

(a) 8-hour day and 44-hour week.
(b) Unemployment Insurance.
(c) Old age pensions.

"(a) As regards the question of the 8-hour day, it will be recalled that one of the draft conventions passed at the International Labour Conference at Washington, November, 1919, was in favour of an 8-hour day and 48-hour week. Up to the present time this convention has been ratified by only four countries, of which the most important, industrially and politically, is Greece. In other words the convention has been a "dead letter". Even Great Britain, where the 8-hour day is in effect in a certain number of industries and public utilities, refuses to commit herself to the general principle of the 8-hour day as a hard and fast rule throughout all industry. As regards the situation in this country, the reasons for which the Association opposed the 8-hour day principle at the Washington Labour Conference in November, 1919, are just as cogent to-day, namely:—

"(1) That, in addition to all the objections that apply in more settled countries, in a new undeveloped country like Canada to which it is essential to attract new capital, new industries, the effect of such legislation would be disastrous.

"(2) That, it is absolutely impossible for Canada to think of passing such legislation unless and until similar legislation is passed in the United States.

"Note:—The late Dominion Government ruled that the 8-hour day question was one of provincial jurisdiction. The only province which has passed legislation giving effect to this convention is British Columbia which at the last session of the legislature passed an 8-hour day act with the proviso, however, that it should only come into force "concurrently with or after the coming into operation in the other provinces of similar legislation."

"(b) Unemployment Insurance also was the subject of a draft convention at the Washington Conference. This question has been declared by the Dominion Government to be one of federal jurisdiction. In so deciding the late government pointed out that the experience of other countries has demonstrated that any such system in order to be effective and successful must be merely ancillary or complementary to a system of labour exchanges, the whole being adapted to the principal function of finding work for unemployed insured workmen.

"In this connection your Committee beg to recall that a year ago Mr. Rollo, the Ontario Minister of Labour, stated to a deputation, which waited upon him from the Association, that he had proposed to the Dominion Government that a Dominion-Provincial Conference should be called to take up the question of legislation necessary to give effect to the Washington conventions in order to get over the constitutional difficulties as to jurisdiction. This conference, however, was never held but it is now rumoured that the new Federal Minister of Labour may take steps to convene it.

"As regards the policy of the Association, your Committee's recommendation would be that the various schemes of unemployment insurance which have been tried in England and other countries have been a conspicuous failure and that no scheme of unemployment insurance is required or would be advisable in Canada.

"(c) The Old Age Pensions question was not the subject of any convention or recommendation at the Washington Conference but Old Age Pension Legislation is, of course, in effect in England and other European countries and it has for some time been a plank in the platform of Organized Labour in this country."

Legislation Committee

The Legislation Committee reported that the efforts of the Legal Department to secure an inter-provincial conference looking toward uniform legislation and regulations in connection with company matters was vigorously continued, but, as practically all the provincial legislatures were on the eve of convening their sessions, the Provincial Secretary of Ontario had intimated that the conference must of necessity be postponed until the various prorogations. The Hon. Mr. Nixon, who favored the conference being held in Ontario, gave the assurance, however, that the matter was receiving all due attention and that it was confidently hoped that it might be ultimately found possible to get representatives of the different provinces together with much resulting benefit for all parties.

The Committee further reported that application would be made at the forthcoming session of the Ontario Legislature to have the Ontario Bulk Sales Act ammended to correspond with the British Columbia Act, which was a copy of the uniform Bulk Sales Act, approved by the commissioners on uniformity of legislation in Canada, and which went into effect on January 1, 1922. The effect of this would be to make three provinces adopt a uniform act and would be a further step in facilitating other manufacturers' legislation along lines of uniformity.

The Committee pointed out that by an amendment of the Ontario Companies Act adopted at last session of the Ontario Legis-

ature, all incorporated companies doing business in the Province of Ontario, whether provincial or extra provincial, are required without notice to make an annual return to the Provincial Secretary, before the 8th day of February, each year, the purpose of which is to enable the Government to ascertain what Dominion companies may be required to take out a license-in-mortmain as laid down by the judgment of the Privy Council delivered on 25th February, 1921.

Reference was then made to the proposal of the Public Service Commission of Ontario to recommend to the provincial government that it should be made compulsory for manufacturers to register lien notes taken for the purchase price of goods.

"This would mean," said the report, "among other things, that no unregistered lien note would be good against third parties. It would mean, of course, that the expense of the registration and of the organization necessary to carry it out would be thrown upon manufacturers, which might reach the of sum of $150,000 a year at least and would apply to all companies engaging in such business in Ontario.

"Your Legislation Committee was informed that this change is being strongly advocated by certain of the sheriffs throughout the Province and that unless vigorous action were taken by this Association, the law would likely be amended as indicated.

"Your Legal Department issued a circular to all the manufacturers in Ontario inviting their views, after which a representative conference was held in the Association's offices. In pursuance of instructions given by this meeting, a largely attended deputation of members of this Association from various parts of the Province appeared before the Public Service Commission of Ontario, on Thursday, 29th December. In order to press the case against making compulsory the registration of manufacturers' liens, three briefs were handed in, one on behalf of the Ontario Division of the Canadian Manufacturers' Association, one on behalf of the Piano Manufacturers, and one on behalf of Automobile Manufacturers.

"All three briefs were to the same effect that the law as it stands at present, has worked well since 1889, in that it has made possible the freeest buying and selling of manufactured goods, which is more important than the protection of third parties for the convenience of sheriffs or bailiffs."

The Legal Department reported that it was keeping in close touch with the commissions on uniformity of legislation in Canada in the framing of new legislation. Two new model acts were (1) The Fire Insurance Policy Act, intended to make uniform the law respecting conditions in policies of fire insurance which was referred to our Insurance Department for a report from the Insurance view and (2) The Warehousemen's Lien Act, intended to make uniform the law respecting Warehousemen's Liens, which was revised and generally approved.

Manufacturers Address Council of Women

Home facts regarding Made-in-Canada goods are given by three Montreal Manufacturers

BY special invitation of the Local Council of Women, Montreal, three representatives of the Canadian Manufacturers' Association attended the January meeting of that organization in order to discuss the Made-in-Canada question. The manufacturers were A. O. Dawson, managing director, Canadian Cottons Limited; J. G. Dodd, Dominion Textile Co., Limited and P. S. Doig, Tetreault Shoe Manufacturing Co., Limited.

Mr. Dawson, speaking on behalf of the cotton manufacturers, declared that not only did the purchaser of Made-in-Canada goods get sound value but better value than if she bought imported goods, because on the latter there was a much larger percentage of profit. Canada, on account of its relatively small population, could not attempt to make the variety of lines produced in the United States or in Great Britain and therefore confined its effort to the production of staples. The demand for the very fine lines, termed "novelties" in the trade, was so small that it did not pay to make them. It was better in the interests of Canada to stick to staples and make these lines in large quantities than to make small quantities of many lines.

The finest gingham in the world was now made in Canada. Other countries skilled in the art of "filling" sometimes turned out stuff which looked superficially better than the corresponding Canadian line but after a short period of wear the filling disappeared and the poorness of the article was revealed. Canadian goods made of pure cotton without dressing, retained their initial appearance.

That the feeling in favor of Canadian-made goods was growing was evidenced by the fact that production had increased 400 per cent during the last seven years. The demand was still greater than the capacity to meet it, though new machinery was being rapidly prepared. Imports were not nearly so large as was generally supposed, Canadian mills having turned out in 1921 goods to the value of $63,000,000 while only $8,000,000 worth was imported during the same period. This was made up largely of novelty lines not made in Canada.

Time was when it was the custom to ask for English and American goods and this demand was maintained as far as woollens were concerned. The idea persisted that English tweeds or cloth were better than Canadian at the same price. This idea was to some extent kept alive by the tailoring trade which reaped a larger profit on English lines. Canadian lines became known and marked and were subject to constant cutting by rival manufacturers. During the war, the speaker claimed, Canadian mills had worked on a smaller margin of profit and had given better value than any other country in the world. The industry was now in a prosperous state and only one mill in the country was not working full time. The workers were getting a fair wage, and there was no unemployment.

A member of the Council asked if it were not true that stockings made in Canada were often inferior to English makes. J. D. Dodd, in reply, said Canadian stockings were equal to English at the same price. There had been a prejudice in the past against marking things Canadian in origin. The demand was for English and American goods and, in order to ensure sale, Canadian goods had often been sold as English or American and had at once found a ready market.

Canadian Goods Marked

The member asked what guarantee under these circumstances the purchaser had when buying Canadian goods that they were really made in Canada. It was explained that in the days, when Canadian cotton goods were sold as English, they bore no stamp, but today Canadian goods were marked. The recent rule that imported goods should be marked with the country of origin had been withdrawn and the speaker suggested that the Local Council might do useful work by getting that rule put into force.

Speaking for the shoe manufacturers, Mr. Doig said that in the past women had not been so patriotic as they might have been and had persistently demanded American footwear, though Canadian was as good. Many women who thought they were wearing American shoes were wearing Canadian, for Canada only imported five per cent of her shoes. The public had to be educated to the fact that Canadian values were as good as any others.

Women were largely to blame for keeping up prices by their demand for freak shoes in which styles changed over-night. No price the retailer could ask under these circumstances ensured him a safe return.

War Prices Too Low

Replying to a question as to whether associations of manufacturers were not primarily concerned in keeping up prices, Mr. Doig said that the shoe manufacturers to his knowledge did not make enough profit during the war to carry them over the present slump. They did not charge enough and consequently the trade today was in a bad state. This statement was received with open dissent by the women and Mr. Doig declared that the subject was open to careful examination by anybody. The war price of shoes was based on cost and the trouble was that the manufacturers did not get enough.

One member of the audience attacked the retailers. "I have bought shoes for many years through the wholesale and I know enough of the trade to know there was never any justification for a retailer to charge more during the past seven years than he charged in 1913. Women are to blame for paying the price asked," she said.

Hides Often Worthless

Another member asked why, when farmers in the West practically had to give hides away, the price of shoes kept high. The speaker explained that hides obtained straight from the farmer were often worthless owing to the way in which they had been removed and other causes. The best hides came from the butchers in cities, and these brought a fair pirce. The poor hides made inferior leather which no woman present would wear.

The speaker referred to the world-wide reputation which British goods had built up. That reputation was built on honest goods and there was no reason why Canadian goods if handled in the same way should not achieve the same result.

The Executive Council at its January meeting gave formal approval to the proposal that the 1922 Annual General Meeting of the Association should be held in Maritime Division territory. The Convention will therefore take place on June 20, 21 and 22 at St. Andrew's, New Brunswick, where the big Algonquin Hotel, one of the finest summer resort hotels on the continent, has been engaged for the occasion. St. Andrew's is one of Canada's beauty spots and in June it should be at its loveliest. All the surroundings of the convention bid fair to be most attractive. Following the meeting, a tour of the provinces will be undertaken, which will give members in Quebec, Ontario and the West an opportunity to view this most interesting section of the Dominion.

Largely Attended Luncheon at Hamilton

Important Address delivered before record gathering by Mr. S. R. Parsons of Toronto

LUNCHEON facilities of the Royal Connaught Hotel, Hamilton, were taxed to the limit on Thursday, January 19, to accommodate the crowd in attendance at a meeting held under the auspices of the Ontario Division, to hear an address from Mr. S. R. Parsons on the work of the International Labor Conference at Geneva. About 100 members went to Hamilton on the special C. P. R. train, chartered by the Association for the use of Toronto and Eastern Ontario members, and there was also a large representation from points in Western Ontario. A delegation from the Quebec Division, who had come up for the meeting of the Executive Council, were also present. Altogether between three and four hundred members sat down to luncheon.

The following cities and towns were represented in the gathering,—St. John, N. B., Montreal, Sherbrooke, Ottawa, Perth, Smith's Falls, Peterborough, Whitby, Toronto, Hamilton, St. Catharines, Port Colborne, Welland, Vineland Station, Thorold, Grimsby, Winona, Guelph, Brantford, Dundas, Galt, Hespeler, Kitchener, Woodstock, London, Chatham, Amherstburg, Walkerville, Wingham, Ingersoll, Orillia, Bolton, Owen Sound, Port Elgin, Dunnville, St. Thomas, Barrie, Courtright, Sarnia.

W. S. Fisher, president of the Association, presided and seated at the head table were S. R. Parsons, Robert Hobson, Brig. General Labelle, G. C. Coppley, John R. Shaw, C. Howard Smith, W. C. Coulter, S. F. Rutherford, Cyrus A. Birge, George H. Douglas and J. S. McKinnon.

Mr. Parsons prefaced his remarks on the work of the International Labor Conference with an interesting review of conditions in Great Britain, France, Switzerland and Germany.

A fact which forcibly appealed to him while in Europe was that Great Britain, once the leader of the industrial world, did not appear to be in a position to accept the present opportunities for world trade. This was brought to his attention by the fact that the Chinese Government called for tenders for railway equipment amounting to several million dollars, mostly locomotives and cars. Great Britain's tender was frightfully high in comparison. It got none of the large contract. Even the United States succeeded in getting a contract for only five of the locomotives, while the remainder of the large order went to Belgium.

"If Great Britain, therefore, is unable to cater to world trade, in which she has always been eminent, then I don't know what is to become of her. The high cost of living, the high wages, the consequent short hours and the general inefficiency of labor have dealt Great Britain a terrible economic blow. If these conditions continue, then, I repeat, I have misgivings as to her future," he said.

Great opportunities for trade in Great Britain were presented to Canada, however, said Mr. Parsons, and he urged Canada to wake up, as her efforts in this respect did not compare favorably with those of the other great Dominions of the Empire. Now that Sir George Perley had resigned, he thought it was opportune, and an excellent thing, if Canada's diplomatic representative in England were separated from Canada's business representation there.

He referred to the recent formation in London of the Canadian Chamber of Commerce, the prime mover in which was Sir George McLaren Brown, who was ably supported by the Agents-General of the various Canadian Provinces. The Manufacturers' Association, Mr. Parsons said, should give this body a reasonably substantial subscription. The Federal and the Provincial Governments should likewise give generously.

A squarer deal for the Western farmer by the lowering of transportation rates was also urged by Mr. Parsons. He said that it devolved on maufacturers and on the community as a whole to see that better facilities were secured so that the products of our prairies could reach the seaboard and compete in the world markets, and still leave something for the farmer who produced them. The solution was lower transportation rates.

Conditions in Germany were briefly reviewed. People there were working hard. Krupp's factory was engaged in making locomotives and bicycle parts. Wages were extremely low. A German workman, after toiling for a week, earned scarcely more than enough to purchase a decent pair of shoes. Germany was getting her raw material by reason of much of the scrap available from the war. The exhaustion of this supply was imminent.

Concluding, Mr. Parsons dealt with the immediate outlook in Canada. "Is there any solution of our industrial ills? Personally, I don't look for it through international Labor conferences, nor through organizations of employees and employers. I believe that, through co-operative effort, sincerity on the part of each individual will materially help solve the question. The employer today who does not cultivate the acquaintance of his men and put aside other things to reach that end is making the mistake of his life. Hard work, sweetened with the leaven of good-will, is the keynote today of our industrial peace."

(As the work of the Geneva Conference is covered thoroughly elsewhere in this issue, Mr Parsons' interesting review of its proceedings at the Hamilton meeting will not be included in this report.—Editor.)

Sir John Eaton Entertains Officers of C. M. A.

On January 23, to mark the opening of a Made-in-Canada Exhibition in the Eaton store, Sir John Eaton, president of the T. Eaton Co., Limited, Toronto, tendered a luncheon to the president and executive of the C. M. A. There were present as representing the Association, W. S. Fisher, St. John, the president; John R. Shaw, Woodstock, first vice-president; Thomas Roden, Toronto, treasurer; J. S. McKinnon and S. R. Parsons, Toronto, past presidents; W. C. Coulter, Toronto, chairman Ontario Division; Col. Arthur Hatch, Hamilton; John M. Taylor, Guelph; J. E. Walsh, general manager and J. T. Stirrett, general secretary. Lady Eaton, Mrs. Timothy Eaton, Mrs Burnside and a number of the officials of the Company were also present.

In welcoming his guests, Sir John stated that the object of the exhibition was to give the purchasing public something like an adequate idea of the variety and uniform excellence of Canadian products. He himself, although he had always felt that goods could be manufactured as well, if not better, in Canada than anywhere else, had been amazed at the fine workmanship shown in the articles exhibited. He was sure that even the manufacturers themselves would be surprised at their variety and comprehensiveness. He explained that none of the articles were for sale, the exhibition being educational in its object. No attempt had been made to indicate the value of the articles placed on view but in every case the manufacturer's name and the location of his factory had been indicated.

Mr. Fisher, in replying, expressed the opinion that the war had given an impetus to manufacturing in Canada which it would have taken at least 25 years otherwise to accomplish. He felt that the slogan "Made-in-Canada" should be widened to "Produced-in-Canada", since then it would include the products of the farms, mines, forests and fisheries as well as the factories. It was desirable that, in tapping our natural resources, manufacture should be carried to the last process in Canada, so that our own labor could be utilized to the greatest possible extent.

Mr. Shaw, by referring to the startling way in which Canadian boys and girls had in years past migrated to the United States, declared that it was vital to the future welfare of Canada that the policy of protecting and patronizing Canadian industries should be maintained. He admitted that the country labored under geographical difficulties and pointed out that the western farmer was not so much against the protective tariff as against high freight rates. Transportation must be made cheaper.

Other speakers were Thomas Roden, J. S. McKinnon, W. V. Ecclestone, head of the Eaton Canadian buying office, V. H. Dennis, chairman of the exhibit, and Lady Eaton.

After the luncheon, the visiting manufacturers inspected the various exhibits.

Maintenance of Resale Price

The U. S. Supreme Court on the 3rd January, 1922, reversing the U. S. Circuit Court of Appeals held that, while it is within the full right of the producer to fix a resale price for his products and to decline to sell to those who will not sell them at the prices which he fixes for their resale, he may not in the exercise of this right go further; that when by contract or agreement, express or implied, he agrees with jobbers and other distributors that he will not supply his goods to those who refuse to maintain such resale price that he is without the protection of the principle of law that a trader may choose his own customers.

Recent Publications

336, January 6, 1922.—Circular issued by the General Secretary and signed by the President and General Manager, explaining arrangements for the proposed trip to the West Indies and asking members to advise as soon as possible whether they can join the party.

337, January 14, 1922.—Circular issued by the Tariff Department advising that operation of marking of goods act has been postponed until close of next session of Parliament.

338, January 23, 1922.—Circular issued by the General Secretary and signed by the President and General Manager, explaining policy of the Association with respect to "good will" donations and advertising.

339, January 28, 1922.—Circular issued by the Tariff Department relative to certain proposed changes in the sales tax law and asking for an expression of opinion on them.

Death of Prominent Manufacturer

Members of the C.M.A. will be sorry to learn of the death on January 11th, of Peter Quance, founder and president of Quance Brothers, Limited, Delhi, Ontario. The late manufacturer, who was in his seventy-fourth year, was one of the oldest living members of the Association and was highly esteemed by all who knew him.

News of the Month from Maritime Division

Headquarters of Division—Amherst, Nova Scotia

Chairman.....L. W. Simms, T. S. Simms & Co., Ltd., St. John, N.B.
Vice-Chairmen.....C. S. Sutherland, Amherst Boot and Shoe Co., Ltd., Amherst.
J. A. Marven, J. A. Marven, Limited, Moncton, N.B.
J. E. McLurg, Halifax Shipyards, Limited, Halifax, N.S.
Secretary.....H. R. Thompson, Box 470, Amherst, N.S.

AT an Executive Committee Meeting held in Amherst on January 5th, it was unanimously decided to extend an invitation to the Association to hold the 1922 General Convention in the Maritime Provinces, and "St. Andrews-by-the-Sea" was suggested as the place. This is a picturesque town of natural beauty, situated in Charlotte County, to the South of New Brunswick, and on the shores of the Bay of Fundy.

Excellent accommodation can be secured at the C. P. R. summer hotel "Algonquin" and the surrounding country and sea shore affords opportunities for varied pleasures. A good time is assured as G. C. McAvity of St. John has been appointed convener of the Entertainment Committee. All who known "Clifford" know what to expect and they will not be disappointed.

Arbitration Board Appointed

During the month of November the chief coal operators of Nova Scotia notified their employees that a substantial reduction in wages would be put into effect on the 1st of January. The employees immediately applied to the Department of Labor for an arbitration board under the Industrial Disputes Act. The application was granted and the Board has completed taking the evidence.

In justification of their decision to reduce wages, the operators submitted evidence under the following general headings:

a. The fall in commodity prices (or increased purchasing power of money) enabling the purchase of all classes of goods with smaller expenditures of money when compared with war-time prices.

This is the process of "deflation" and it is accompanied by decreased cost of living, requiring and permitting only lower rates of wages.

b. Constant lowering of selling prices of coal, which, being a commodity, must follow the general trend.

c. Increase in the coal production of the world, caused by industrial restoration in Europe, closing this market to Nova Scotian coal, at our present cost of coal mining.

d. Entire lack of demand for steel goods, reducing greatly the proportion of coal used in steel-making.

e. Decreased call for ships' bunkers at Nova Scotian ports and entire cancellation of cargo business at these ports.

f. Increased pressure of United States competition in the whole of Eastern Canada due to excess of coal supply over demand in the United States.

The representatives of the miners gave lengthy evidence in rebuttal but it can be summed up in the concluding remarks of F. P. Hanway, International Representative U. M. W., who is reported as stating that:

"We (the miners) have never been satisfied with a mere existence as the result of our labor, such as is implied by the companies as stating that wages should come down for the reason that living costs have declined. The aim and desire of the miner is not a mere subsistence level or to meet a family budget that does not take into consideration the saving of a sufficient amount from his earnings that will provide for him and his wife in the evening of their lives. The miner and his family are entitled to some happiness and some pleasure in life, and worthy of something more than enough food to produce profits for those who do not toil. We contend that the happiness and welfare of the men, women and children of this great province are, or should be, of more concern to this Board than the payment of dividends to shareholders in any industrial concern, and we also believe that if the time does ever come when the prosperity of the miner or the security of industrial enterprise is jeopardized by cheap commodities imported from the United States, then it will become the duty of the citizens to see that the Federal Parliament protect both the worker and the industry. We believe that we have shown good reasons to this Board why the wages of the miner should at this time remain as they are, to reduce the wages of the miner at this time, means that every other craft will have to suffer a like reduction in wages, which will without doubt decrease the purchasing power of the man and woman who toils, thereby reflecting its baneful influence on every man and woman in the province, as it is a well known historical fact that a nation whose toilers are not prosperous and reasonably contended is indeed poor. We hope that this board will weigh well these matters, as the whole question at issue is, shall the worker be consigned to bare sustenance, a more existence, not more than two weeks from hunger and starvation; or shall the profits of the corporation be paid that some shall live in ease and comfort through profits realized from an industry that they have at no time been a factor in its productivity."

Miners Loot Company Stores

A rather serious outbreak among the miners at New Aberdeen, near Glace Bay, C. B., took place on Saturday, January 21st, when several hundred of them rushed the Dominion Coal Company stores and carried away goods estimated to value upwards of $100,000.

The outbreak is supposed to be the climax of a series of events at No. 9 Colliery. This mine had been idle for several days and it is reported that some of the miners were refused goods at the Company Stores and not having the money to purchase elsewhere, simply decided to get them by force.

The unemployment condition, in the coal mining districts, is becoming rather acute, and it is hoped that an early and favorable settlement in the wage dispute will be reached and result in increased employment and thus relieve the intense situation which has developed.

Two Interesting Resolutions

As showing the attitude of the organized miners towards capital, two resolutions recently adopted by locals of the United Mine Workers of America in Cape Breton may be of interest.

The first is one passed by Caledonia Local 1530. It recalls Premier King's declaration at Sydney on September 27 that there were four parties to industry,—capital, management, labor and the public,—and that there should be joint control. It then declares that, in order for labor to share in the management of the coal industry in the section, representatives of labor must be placed on the board of directors of the Dominion Coal Co. It finally resolves that the district executive be requested to hold a referendum for the purpose of choosing two miners to sit on the board and that, when selected, the Dominion Coal Co. be requested to make a place for them on the board of the company.

The second resolution was passed by Harbor Seam Local, 4523. It referred in its preamble to an alleged declaration of the British Empire Steel Corporation that the mines under its control are difficult of operation and cannot compete with the Pennsylvania mines unless corporation is allowed to to pay lower wages. It further declared that the earning capacity of the mines had been overvalued and that the Corporation was trying to earn large profits at the expense of labor. It stated that the miners of Nova Scotia were resisting efforts to lower wages and the standard of living and that the struggle between the Corporation and the miners was producing and would continue to produce strife, turmoil and upheaval. It finally declared that the only way to solve the difficulty was to oust the Corporation from the coal industry and that to do this its coal leases should be cancelled and the province take over the operation of the coal industry.

Transportation Matters

The Board of Railway Commissioners held hearings in Halifax and St. John on January 17th and 19th respectively and representations were made in support of the Provincial Governments' application for the restoration of class arbitraries, over Montreal, which were in effect previous to the judgment in 1916 in the Eastern Rates Case. Hon. R. E. Finn of Halifax acted as Counsel for the Nova Scotia Government and I. C. Rand of Moncton for the New Brunswick Government. A number of manufacturers throughout the Provinces were called upon to give evidence and G. P. Ruickbie, representative of the C. M. A. Transportation Department, and the Divisional Secretary, visited various centres to assist the representatives of these industries in preparing the material for submission.

To show the effect of the straight percentage increases to the Maritime shippers, whose markets are largely in other provinces, the following comparison of increases since the year 1915, in first-class rates from Montreal and St. John to points West, is submitted:

From Montreal to Toronto	$ .44	to $ .83	–88.6%
From St. John to Toronto	.64	to 1.25¼	–96.0%
From Montreal to Ft. William	1.05	to 1.99¼	–90.0%
From St. John to Fr. William	1.25	to 2.43	–94.4%
From Montreal to Winnipeg	1.60	to 2.67¼	–67.0%
From St. John to Winnipeg	1.80	to 3.08¼	–71.0%
From Montreal to Calgary	2.88	to 4.59¼	–59.5%
From St. John to Calgary	3.08	to 5.00¼	–62.5%
From Montreal to Vancouver	3.62	to 5.70¼	–57.6%
From St. John to Vancouver	3.82	to 6.11¼	–60.0%

From the above it is easy to see the increased handicap under which the Maritime shippers have been laboring when endeavoring to compete for markets west of Montreal.

As all class rates are reciprocal for East and West bound traffic, the restoration of the old arbitraries would not only be beneficial to the Maritime shippers, but would give the central and western shippers a better chance to compete in Maritime markets.

Canada's population is made up of scattered units and the necessary intercourse to bind these into a harmonious whole can only come through the transaction of business. It is therefore the opinion of the citizens of the Maritime Provinces, that when establishing freight rates it is necessary to take into consideration other factors than the purely scientific rate-making formulae. The Maritime Provinces are asking for nothing except a favorable opportunity to carry on business with the other sections of Canada and thereby remain an integral part of the nation, rather than an isolated unit.

This Month's Activities in Quebec Division

Headquarters of Division—113 Board of Trade Building, Montreal

Chairman.....J. H. Fortier, P. T. Legare, Ltd., Quebec.
Vice-Chairman....F. W. Stewart, Cluett, Peabody & Co., of Canada, Ltd., Montreal.
Secretary.....R W. Gould.

AT the January meeting of the Export Club of Montreal and District, the latest addition to the series of clubs developed by the C. M. A., there was an audience of 300 enthusiastic export men. Pleasure mingled with business and the absorption of nourishment. A local entertainer related a group of stories that went very weli and intrigued the audience into joining him in French folk-songs and the time-honoured "Old Macdonald has a farm."

The occasion was marked by the first appearance in a ministerial capacity of the Hon. J. A. Robb, M.P. Minister of Trade and Commerce in the King Cabinet. His principal utterances are given below. Mr. S. R. Parsons, the Canadian employers' representative at the International Labor Conference, gave an interesting review of his observation of European business conditions and dealt with the results of the Conference. Mr. Parsons' remarks are covered in another section of this issue.

Mr. Robb's Address

"I am not here as a teacher, but as a student, willing and eager to learn, that the Department of Government Service over which I have the honor to preside may become even more useful than it has been" said Mr. Robb in opening. "I am here not to give, but to receive, advice. May I express the hope that you will be generous with your advice as we would like you to be with your support for as you know, 'governments cannot live by advice alone.'

"The Department of Trade and Commerce was created and designed to help, not to hinder, trade either within or without Canada. The measure of the usefulness of that Department of Government Service will be in proportion to the help given and the encouragement offered by fellow Canadians interested and employed in the production, the manufacture, the transportation and the distribution of Canadian products. Having worked as a producer, as a manufacturer and as a trader, always willing to trade wherever and whenever there was a profit, experience has taught me that every branch of service from producer to consumer has its risks, sometimes a profit, other times a loss. A good healthy profitable trade is not built up in an afternoon, nor at an annual dinner—even if the menu is as good and the company as genial as it is to-night.

"Every successful trader in this room knows that profitable trade is not built up by Government alone—even as a good a government as we now have can accomplish little without support, the co-operation of the wide-awake, bright, brainy business-men of Canada, and so, Sir, I am here as the representative of a government that wants to be good, a government that hopes to be useful in developing Canadian trade at home and abroad. And you ask me, "What is our policy, what is to be the policy of the Department of Trade and Commerce?" Well, Sir, I am Scotch, and a Scotchman always answers a question by asking another. What policy do you want us to pursue? Do you want government agents to attempt to handle your business at home and abroad, or do you want the government to stand out of the way and give Canadian business men a chance to do business in a business way, taking profits, if profits are obtainable, but maintaining their established connections and their customers, through the uniform good quality of Canadian products? If that is to be the policy, then I venture to believe that Canadian export trade will grow from year to year and that eventually Canada will win out even against hostile tariffs. We may as well face the issue and at once admit that the Great War for freedom and the rights of small nations has not only burdened the taxpayers of the world with enormous debt, and governments and people with extravagant habits, but has also fostered a spirit of tariff warfare throughout the world, which must, I imagine, like all other wars, run its course.

"Recently some of our good customers have revised the customs tariff, apparently with a view to reducing trade with their own best customers. They may temporarily disturb Canadian trade, but they cannot discourage nor destroy Canadian enterprise.

"It is a rule of trade that wherever your sales increase, your purchases also grow, so that as sure as night follows day, if and when a country puts up extreme tariff barriers, hindering necessary purchases, that country places a stumbling-block against its own trade fostering discontent among its own people.

"We, in Canada, have little right to complain if other countries place a prohibitive tariff against our products, but we have a right to try and find markets for the products of our country, to seek out the best and most profitable markets, to give preference to those who give preference to us, and like any well managed business, to secure as many good customers as we can. The world is large; Canada has great resources and is geographically and favorably located to trade either with the Eastern or Western world or with the great countries to the South.

"Is this a time for division? Is it not rather a time for unity, a time for work? The war is over; in that war Canada played a splendid part, at home as well as on the field of battle. Our men are home settling down, taking their places in civil life and public life, willing and eager to do their bit, at home as they have done it abroad, and they will do it if they get a fair chance. Is it not a time to let people of other countries settle their own domestic affairs, while we Canadians settle Canadian affairs to suit Canadian conditions. What is the use of our immense undeveloped resources, in agricultural lands, in forests, in minerals, coal, iron, copper and precious metals, in fisheries, and in great water powers throughout two-thirds, or more, of our provinces? What's the good of it all unless developed and so giving employment to the citizen and revenue to the nation. Only thus can we hope to encourage greater immigration, doubling our population, and so reducing our per capita debt one half.

Is not increased immigration one of the great problems Canada faces to-day. To maintain satisfied and contented our own people, and encourage development that will bring to our provinces, and to each province, the people best suited for conditions in that province, a selected and intelligent class of immigration, we must have a policy that will enable the immigrant who becomes a Canadian citizen to obtain work, to live cheaply and well, to produce economically, so he can meet world competition, export the surplus product of his labor, bringing back the profits, and so will a prosperous and contented citizenship help to build up a greater Canada.

Statistics are dry subjects for an after-dinner speech, and I do not propose tiring you with details of Canadian trade throughout the world. A post-card to the Bureau of Statistics at Ottawa, will secure for you a statement of Canadian sales and purchases from the countries of the world. Canada has what we may term 50 to 75 first class customers. May I give you briefly a list of our best customers?"

(See table below).

Death of Miss Martel

For some time past the Quebec Division boasted that it had one lady member who was deeply interested in the affairs of the Association. She attended meetings of her section, took part in the discussions and as a splendid business woman gave excellent advice. She was Miss F. Martel of the Martel, Stewart Company, sign manufacturers of Montreal. It was largely through her efforts that the Sign Manufacturers' Section of the Quebec Division came into existence. A few days ago she died.

On Saturday, January 28th the Montreal Gazette carried the following article:

"Word was received in Montreal last night of the death at St. Vincent Hospital, New York, yesterday of Miss Francis Martel, late of the Martel Stewart Company, Ltd. Miss Martel was born in New York and when a young woman entered the company formed in Montreal by her father. She received practical knowledge of every department of the sign business, and in 1888 was taken into partnership by her father. Shortly after the death of her father in 1895 she took into partnership J. G. Stewart, of Montreal, who remained with the business until 1905 when he sold his interest. Miss Martel then became the owner of the company. She was taken ill last December, and upon the advice of the doctors, who told her she would not be able to look after its affairs any more, she sold the business. She left for New York with her mother on December 12 last, and underwent two operations, the last one being on January 5."

Trade of Canada by Principal Countries

Note: Countries arranged in order of importance of Total Trade in 1921.

	1914 (pre-war)		1921	
	Imports for Consumption	Exports of Canadian Produce	Imports for Consumption	Exports of Canadian Produce
United States	$396,302,138	$163,372,825	$856,176,820	$542,322,967
United Kingdom	132,070,406	215,253,969	213,973,562	312,844,871
Italy	2,090,387	514,660	1,745,330	57,758,343
France	14,276,535	3,632,444	19,138,062	27,428,308
Belgium	4,490,476	4,269,394	4,693,368	40,252,487
Cuba	3,952,887	1,915,414	30,743,239	6,573,768
Netherlands	3,015,456	3,985,987	4,237,791	20,208,418
British West Indies	4,247,310	4,469,329	14,833,746	13,030,225
Greece	445,036	11,934	817,157	20,834,577
Newfoundland	1,840,523	4,508,090	2,886,203	16,676,728
Australia	713,111	4,673,997	791,980	18,112,861
Japan	2,604,216	1,587,467	11,360,821	6,414,920
New Zealand	3,192,900	1,933,698	4,219,965	11,873,000
British East Indies	7,218,987	686,324	14,307,404	6,388,898
Germany	14,586,223	4,044,019	1,547,685	8,215,337
British Empire	154,526,846	238,642,517	266,002,688	403,452,219
Foreign Countries	464,667,152	192,945,922	974,156,194	785,711,482
Total	619,193,998	431,588,439	1,240,158,882	1,189,163,701

Ontario Division's Activities for the Month

Headquarters of Division, Bank of Hamilton Building, Toronto

Chairman.....W. C. Coulter, Booth-Coulter Copper and Brass Co., Ltd., Toronto.
Vice-Chairman.....A. W. White, Geo. White & Sons Co., Ltd., London.
Secretary.....H. Macdonald. Travelling Secretary.....O. C. Pease.

A BRIEF but interesting meeting of the Ontario Division was held at Hamilton at 1 p. m. on Thursday, January 19, following the meeting of the Executive Council of the Association, which took place earlier in the afternoon. The chairman of the Division, W. C. Coulter, presided and in a short address explained the situation which had arisen and the purpose for which the meeting had been called.

One of the most serious problems before the employers of Canada to-day, said Mr. Coulter, was that of unsound, uneconomic labor legislation already passed or being introduced at the annual sessions of provincial and federal legislatures. For the coming sessions, labor papers were announcing legislative programs including immigration, education and unemployment measures.

The Trades and Labour Congress was on record as wanting to close Canada's doors to immigration absolutely. The only phase of the immigration question considered by labour was how it might affect labour's supply or more precisely, how it would affect wages. That Canada should bar the door to undesirables was a foregone conclusion. What Canada needed was new people, through the adoption of a constructive policy of immigration.

Education, the second item on the programme, was badly needed—education in place of unionism, education of boys to learn trades in place of the present restricted union policy of curtailing apprenticeship opportunities. The Canadian Manufacturers' Association had long been alive to this fact, of which Toronto and Hamilton had given conspicuous examples. In Toronto, this year, it was awarding 56 scholarships by competitive examination to enable boys to take a three years' industrial course at the Central Technical School and the achievements of Hamilton had been not less praiseworthy.

Unemployment Insurance

Unemployment insurance could best be judged by its absolute failure in Great Britain, where Government funds running into millions of pounds had been expended, with the result that the undertaking there was a failure. The basic reason for unemployment and general bad business today was that people were not giving a dollar's value for the dollar they received.

The Ontario Government at the beginning of the winter season appointed an Advisory Committee on Unemployment on which this Association was represented. On the authority of the Government of the Province, it was advertised that the vital need of the world today was the production, distribution and exchange of goods, and an appeal was made to every individual in every group to assist in stimulating industry, and for co-operation, having as its objective employment for the largest number of people. All the groups represented on the Advisory Committee, including the industrial, commercial and financial interests gave every evidence of co-operation, but with regard to the labour group, there was the spectacle of strikes in three branches—metal workers, plasterers and plasterers' labourers.

The Advisory Committee had not considered, in any way, much less suggested any scheme of unemployment insurance, which as stated was an admitted failure in Great Britain. Notwithstanding this, Premier Drury addressing the Board of Trade on Thursday January 11th had advocated such a scheme as in his opinion the only conceivable solution, but in that he was not speaking for the Advisory Committee.

Taxation of Dividends

Mr. Coulter then referred to the subject of taxation, pointing out that under the recent amendment of the Municipal Assessment Act of Ontario, taxes were now payable on the amount of dividends received by shareholders in industrial and commercial companies. The taxing of these dividends constituted double taxation. The business tax that for years had been levied against mercantile and manufacturing concerns replaced the old tax on personalty and was designed to afford an equitable substitute easily computed for what in the case of the individual would be an income tax. The effect of the amendment was that manufacturing concerns were still required to pay as a substitute for the income tax the local rate on 60% of the assessed value of the premises they occupied, but in addition to this, the act now exposed to the full operation of the Municipal Income Tax any dividends that a shareholder might receive from a corporation that had already paid the business tax.

The Federal Income Tax law guarded against double taxation by assessing the normal taxes against a corporation, exempting the individual shareholder to the extent of the normal tax already paid on dividends received by him, assessing him for surtaxes in so far as his total income might make him liable thereto.

In connection with dividends which might be paid by a subsidiary Company to the parent Company, and these dividends assessed against the parent Company, it was a flagrant case of double taxation to charge the subsidiary company again with the municipal income tax. The argument of the assessment department was that any taxes paid by the parent Company would of course be included in the expense of such company before any dividends would be declared or paid to the shareholders of the parent Company, but such payment went to reduce the dividend coming to the shareholder in the subsidiary company who was asked to pay the tax again, and involved the principle of double taxation.

Restoration of Exemption

It was the intention of the Association's Legal Department to apply for restoration of the exemption clause with respect to industrial and commercial dividends, for power to allow subscriptions to charity and education, and interest on borrowed money as legal deductions from revenue and also for a specific definition of the term "manufacturer". When this legislation is introduced, Ontario members would be notified and it was earnestly hoped that every possible co-operation would be accorded to the Committee in a combined effort to secure justice for the manufacturers respecting these taxation subjects.

John R. Shaw, Woodstock, explained at some length the efforts that the Association had made, when the Workmen's Compensation Act was drafted, to have provision made whereby the workmen would be required to contribute to the fund. This, he felt, would have stopped many of the abuses which had crept into its operation and would have saved money to the public, since the public in the last resort paid the compensation. He also narrated the steps taken to maintain the judicial character of the Commission. The Government had, however, seen fit to introduce class representation into the Commission and, while this was deplored by the Association, it was felt that, if labor was to be represented, the employers should also be represented. Mr. Shaw accordingly moved the following resolution, which was seconded by George H. Douglas and carried unanimously,—

"Whereas the recent appointment of a labour representative to the Workmen's Compensation Board has unfortunately divested the Board of its former judicial character and introduced the principle of class representation:

"Therefore be it resolved by this Ontario Division of the Canadian Manufacturers' Association that it be urged upon the Ontario Government that the only equitable course, in justice to the employers of the Province, is to increase the present Board to five, giving the employers the right to nominate a representative, and to appoint as the fifth member, a neutral man of judicial character."

A number of members participated in a discussion of workmen's compensation and, judging by the keen interest shown, the meeting might have been prolonged for many hours. It was necessary, however, to bring it to a close before five o'clock in order to permit Toronto members to catch their special train.

Taxation of Dividends

A delegation, headed by J. G. Hossack, chairman of the Legislation Committee of the Division, waited on Hon. H. C. Nixon, Provincial Secretary, on January 25 and presented arguments in favor of the restoration of the exemption clause with respect to industrial and commercial dividends in the provincial assessment act and in favor of certain specified deductions which may be made from taxable revenue.

It was argued that the levy on dividends constituted double taxation. A policy of taxation which puts unduly heavy burdens on industry, it was pointed out, would inevitably endanger the industrial reputation of the Province and tend to discourage new industries from establishing themselves in a community where conditions were different.

The deputation asked for restoration of the exemption clause with respect to industrial and commercial dividends; that the "net loss," if any, in the year's trading, may be deducted from the taxpayer's net income for the succeeding year and any unabsorbed balance may be deducted from the net income for the next succeeding year; that the carrying charges incurred by shareholders to the extent of interest paid on borrowed money on the stock or shares which provided the dividends be allowed as a deduction from taxable income; subscriptions to charities and education to be allowed as legal deductions from taxable revenue to the extent of 15 per cent. thereof per annum, as in the United States, and that "retail," for the purposes of the Business Assessment provided for by Section 10, shall include that portion of the premises owned or occupied by a manufacturer or wholesaler in which sales are made to users or consumers.

In reply the Provincial Secretary admitted that the delegation had undoubtedly presented a strong case and stated that he personally was in sympathy with some of the representations. For instance, he agreed that subscriptions to charities and education should be made legal deductions from taxable revenue. As the legislation had been so recently enacted, however, he thought that an amending bill would more fittingly be presented through a private member.

Activities of the Month in Prairie Division

Headquarters of Division, 408 Avenue Block, Portage Avenue, Winnipeg

Chairman.....W. G. Fraser, Beaver Soap Co., Ltd., Winnipeg.
Vice-Chairman.....J. W. Ackland, J. D. Ackland & Sons, Winnipeg.
Secretary.....G. E. Carpenter.

REPRESENTATIVES of the Alberta and Saskatchewan Governments met with the Manitoba Cabinet on Jan. 4th to decide upon joint action to bring about special reductions in freight rates, a reduction of the tariff, transfer of natural resources from the Dominion to western provinces, and the adoption of a uniform immigration policy.

Nothing was disclosed as to the manner in which these matters would be followed up but since that time resolutions have been introduced in the Manitoba and Saskatchewan Legislatures by members of the Government requesting the Dominion Government not to re-enact the amendment to the Railway Act passed in 1919 giving the Board of Railway Commissioners power to set aside agreements in arriving at reasonable freight rates, which expires on July 1, 1922. This refers particularly to the Crows Nest Pass Agreement, under which low rates were named from points in Eastern Canada to points in Western Canada.

These Governments have been supported in the action they have taken by the United Farmers of Manitoba and Alberta (at their Annual Conventions) the Lumbermen's Association, Western Boards of Trade and other business organizations.

Manitoba Legislation

Prior to the opening of the Manitoba Legislature on Jan. 12th the Trades and Labor Council asked the Government to introduce the following Bills:

(1) Trades Disputes Act, providing for arbitration of all trade disputes.
(2) An eight hour day Act, minimum 44 hours a week.
(3) An Act prohibiting the employment of women two months before and after childbirth; their maintenance during that time to be provided by the Government.
(4) An amendment to the mothers' allowance Act increasing the benefits.
(5) An Act providing for one days rest in every week.
(6) An Act cancelling the Ward System in the City of Winnipeg.

Premier Norris declined to grant these requests stating that to do so would involve the expenditure of two million dollars and would bankrupt the province.

In past years employers have taken what might be termed a defensive attitude with respect to labor's demands, simply opposing bills introduced at their request, when same proved unduly onerous, but this year the Manitoba Employers' Association have taken an offensive position and have requested legislation providing for:

(1) The postponing of strikes in connection with trade disputes until after report has been made with respect to the dispute by the Joint Council of Industry.
(2) A Bill to provide for the incorporation, registration and responsibility before the law both of organizations of employers and workers; for the filing in public offices of constitutions, by-laws, lists of members and officers, and providing that no article of such constitution or by-laws shall have any force unless the Joint Council of Industry shall so decide.
(3) An amendment to the Workmen's Compensation Act reducing medical benefits which have caused large increases in the assessments under the Act; also to provide for reduction from the present minimum benefits of $15.00 per week.
(4) A Bill conferring upon corporations the right to appoint a nominee to vote on money by-laws in municipalities.
(5) A Bill forbidding strikes on public utilities within the jurisdiction of the Province of Manitoba; also by civil servants or municipal employees.
(6) The abolition of the Fair Wage Board; in lieu thereof all wages to be fixed by the Joint Council of Industry.

Saskatchewan Legislation

The Trades and Labor Council of Saskatchewan has requested the Provincial Government to bring down legislation providing for the collection of funds from employers and the payment of workmen's compensation benefits to injured workmen, or their dependents, by a Provincial Board similar to the practice in most Provinces in Canada. However, in Saskatchewan under the present Act workmen have secured benefits of 100% of the wages up to the maximum amount provided by the Act—$2000, and also had the option of suing under common law.

The Trades and Labor Council wish to retain the 100% compensation.

A meeting of employers will be held in Regina on Feb. 7th, which will be attended by Saskatchewan manufacturers and the Secretary of the Prairie Division, to decide upon what action shall be taken in respect to the latter.

Alberta Legislation

At the Annual Convention of the Alberta Federation of Labor held in Lethbridge during the first week in January, it was decided to ask "That more and sharper teeth be put into the Workmen's Act, and also that the Provincial Government be asked to provide for an Old Age Pension Scheme". No doubt these matters will come before the legislature when it convenes.

Branch out in Western Canada

The Coco Cola Company has decided to make Winnipeg its headquarters for Canadian trade and to proceed with the construction of a $300,000 plant at Winnipeg, which will supply 14 branches in Canada from Montreal to Vancouver. Clarence F. Roland, has been appointed sales manager for Canada. Mr. Roland is the son of C. F. Roland, managing secretary, Manitoba Employers' Association.

Made in Canada Campaign

The Made-in-Canada campaign received two boosts in Western Canada last month when delegates at the Annual Meeting of the Canadian Co-operative Wool Growers Ltd., held in Brandon on Jan. 6th, decided that steps should be taken to establish in the minds of the consumers a pride and confidence in using and wearing goods made from Canadian Grown Wool. It was reported that cloth manufactured from domestic wools had been shown at Eastern Fairs last summer with good results and it was proposed to follow this up at Western Fairs this year.

At the annual banquet of the North Western Commercial Travellers Association held in Winnipeg on December 30th, the principal speaker, W. Gordon Fraser, Chairman of the Prairie Division, took the opportunity to point out that many of the charges leveled at Canadian Manufacturers, particularly that they were charging exorbitant prices and hiding behind the tariff, were untrue and unfair. He stated that the majority of Canadian Manufacturers were absolutely playing the game and selling goods to the trade at prices which were not only reasonable but fair and equitable in every way. He appealed to the commercial travellers, whom he pointed out were in a position to lend material aid in building up Canada, to inform themselves and refute these charges on every possible occasion.

Western Firm Invades East

Probably for the first time in the history of the building industry of Canada a local Winnipeg firm has competed successfully in securing a big eastern contract. The Western Supply and Manufacturing Company, of Winnipeg of which E. F. Hurd, is President, has obtained the contract for the supplying and installation of all wrought iron work including stairways, elevators and enclosures in the new ten million dollar Mount Royal Hotel at Montreal.

Among Western Industries

Thirty-six years of progress and development on one site is the excellent record of the Royal Crown Soap Company, Winnipeg. The Company started operations in 1885 with very small premises. Today it has a capacity of one hundred thousand tons of soap yearly, employing the latest machinery in making seventy-five brands of soap. In addition to the mechanical end of the business, which is thoroughly up-to-date, the company maintains a laboratory for testing of materials and devising new products.

Another of the older industries in Winnipeg is that of the Drewry Company, which commenced operations in 1877 with a very small plant and motive power produced by one horse. Today the company's plant consists of six large main buildings and a number of smaller ones with a total capacity of one hundred thousand bottles of temperance drinks per day. This is another industry that has grown in Winnipeg on the original site. The founder of the business, E. L. Drewry, still occupies the position of president of the company. Mr. Drewry was chairman of the Prairie Division a few years ago.

Membership

"Nothing succeeds like success" and so manufacturers in the West, knowing the degree of success that has been attained by the C. M. A. in helping them in their problems as manufacturers, are rallying around the organization as never before in the Prairie Division. The Executive and members of the West extend cordial greetings to the following new members:

McNab Flour Mills Ltd., Humboldt, Sask.
Gurney North West Foundry Co., Winnipeg.
A. L. Macintyre Marble & Granite Dealers, Winnipeg.
Alberta Brick Company Ltd., Edmonton, Alta.
Hulse Manufacturing Co. Ltd., Winnipeg.
Chevrolet Motor Co. of Canada Ltd., Winnipeg.

Power Development in Manitoba

Apparently the operations of the Manitoba Power Company in starting work upon the development of 156,000 horse power at Great Falls, Manitoba, has attracted the attention of capitalists and manufacturers throughout America.

Recently, W. S. Mordaunt, who, it is stated, acted as industrial commissioner for several United States railways in the past, and has recently been associated with Webster and Stone of New York, in locating industries in the middle states, paid a visit to Winnipeg for the purpose of looking over the City's industrial possibilities.

Foster Millikan, chairman of the Board of the Alerite Company, New York, manufacturers of cast and rolled alerite and patented non-corrosive metallic alloy, has also been seeking information with a view to taking up a proposition for the manufacture of copper-nickle alloy.

News from British Columbia Division

Headquarters of Division, 705 Board of Trade Building, Vancouver

Chairman ..... J. B. Thomson, Jas. Thomson & Sons, Ltd., Vancouver
Vice-Chairman ..... R. W. Mayhew, Sidney Roofing & Paper Co., Ltd., Victoria
Secretary ..... H. Dalton

HAVING demonstrated the sound economics of a campaign to build up home markets, the manufacturers and producers of British Columbia enthusiastically decided at the first annual meeting of the Made-in-B. B., Made-in-Canada, Made-in-the-Empire campaign held in Vancouver in the evening of Jan. 21th to continue the drive for the development of the province and Dominion. The gathering which was largely attended, not only by manufacturers, but by the executive committee of the United Farmers of British Columbia as well, subscribed nearly $7,000 to carry on the work in the province, and the executive are confident that the budget of $20,000 will be obtained without trouble.

In order to link up more effectively for the different industries, such as agriculture, fishing, mining and lumbering, the style of the campaign was changed, and the parent body, the Manufacturers' Bureau of the Vancouver Board of Trade, also passed out of existence as such to be known in future as the B. C. Products Bureau, while the campaign will shortly be known as the Buy B. C. Products Campaign. Its objects remain the same—to develop British Columbia, Canadian and Imperial preference in the markets of the province.

The work of development of British Columbia will be extended during the year, the recommendations of the outgoing executive that the drive be broadened to establish departments for the building up of the agriculutral and industrial communities being endorsed. This means that the necessary information will be compiled by the Bureau in respect to the opportunities offered in different sections of the province for the location of new industries and the settlement of new agricultural enterprises.

The United Farmers of B. C. not only signified their intention of assisting the manufacturers in the work of the year, but offered to make financial contribution toward the expenses entailed in bringing before every person in the province the advisability of giving first preference to local commodities, second to those of Canada, and third to those of the Empire.

The excellent results attained during the the year—and many manufacturers attribute the manner in which their sales held up, in a large measure, to the campaign—were brought about mainly by reason of the fact that no attempt was made to capitalize sentiment. The argument was used that, "where quality and price were equal", it was good business to develop the province; increase the number of employed men and women; lessen taxation and the necessity for charitable donations, and where money could not be spent to advantage for British Columbia products, then it was also good business to keep the money in Canada for similar reasons, and failing that to keep it within the Empire.

The speakers at the annual dinner were W. F. Laidman, vice-president of the United Farmers, Morton Gregory, head of the Gregory Tire & Rubber Co. Ltd., and E. W. Neel, a prominent dairy rancher and poultry raiser of Vancouver Island.

The executive chosen for the year was comprised of Chairman, Frank Parsons, Gregory Tire & Rubber Co. Ltd.; Vice-Chairman W. A. Hunter, Empress Mfg. Co. Ltd.; Chairman finance section, W. R. McIntosh, Kelly, Douglas & Co. Ltd.; Chairman publicity section, W. Ralph, W. H. Malkin Co. Ltd.; Chairman Educational section, F. A. Brodie B. C. Brush Works Ltd.; Chairman membership section, Walter Leek, Leek & Co. Ltd.; Chairman features section, R. H. Arnott, J. Leckie Co. Ltd.; Chairman Industrial Committee, Section, H. J. Bigger, American Can Co. Ltd.; Chairman Agricultural section, F. G. Evans, Dominion Canners (B. C.) Ltd.; Executive members at large, W. F. Laidman, United Farmers of B. C.; Arthur Nelson, Nelson & Shakespeare Ltd.; J. E. W. Thompson, Restmore Mfg. Co. Ltd.; H. H. McDougall, Morrison Steel & Wire Co. Ltd.; Thos. Dixon, Gault Bros. Ltd.; George H. Hewitt, George H. Hewitt Co. Ltd.; J. Todhunter, Clarke & Stuart Co. Ltd.; B. A. McKelvie continues as campaign manager.

A pleasing feature in connection with the campaign is the active support it is receiving from the agricultural interests in the province, as indicated by the fact that R. A. Copeland, president of the United Farmers of B. C., occupied a seat at the head table at this dinner, coupled with the fact that W. F. Laidman, vice-president of the U. F. of B. C.; is a member of the Executive and chairman of one of its bureaux.

Anti-dumping Legislation

Considerable agitation has taken place in this province recently favoring the repeal of amendments to the Customs Act passed at the last session of Parliament regarding valuation for duty of imports; the intent of these regulations being to discourage the dumping of foreign merchandise in Canada in competition with Canadian products. The B. C. Division have not felt that the repeal of these regulations would be in the best interests of Canadian producers in agricultural, manufacturing of other lines, and have so expressed themselves. The B. C. Fruit Growers Association at their annual convention in Victoria on the 18th, 19th and 20th of January, discussed at length the proposal to cancel the regulations in question, their views in the matter being entirely in accord with the views already expressed by the B. C. Division. The resolution passed on the subject at the Fruit Growers' convention nas as follows:—

"Whereas, the fruit-growing industry of British Columbia, having now reached the place where it is producing more than double the amount of apples that Manitoba, Saskatchewan, Alberta and British Columbia will absorb, thereby assuring reasonable prices to the consumer and the same situation is at hand in respect to practically all kinds of fruit grown in British Columbia, and

"Whereas, the apple-growing section of the Western States are increasing in tonnage, so that today 10% of apples grown in the State of Washington will alone equal the total production of British Columbia, and

"Whereas, the City of Vancouver receives the major portion of the six or seven millions of dollars of the yearly added wealth, created by one section of this industry, namely, the Okanagan Valley supplying labor for its citizens and profit for its manufacturers and merchants, and

"Whereas, the dumping clause with amendments of the present tariff basing dumping duty on cost of production is the only means we have of preventing the Americans dumping sufficient of their inevitable surplus of fruit on to our home market at less than cost of production which would surely, if allowed, destroy the fruit industry of British Columbia:

"Therefore, be it resolved, that we, the fruit growers of British Columbia, in convention assembled, deplore and strongly condemn the action of the Board of Trade of the City of Vancouver in going on record as being in favor of removing from the Anti-Dumping Act the amendments basing the duty on cost of production, thereby destroying its usefulness, and that copies of this resolution be sent to the Premier, the Hon. MacKenzie King, members of his cabinet, Hon. T. A. Crerar, Hon. Arthur Meighen, the British Columbia members of the Federal House of Commons, and the boards of trade throughout the province."

Donated Handsome Trophy

The Box Manufacturers' Section of the Division have put up for annual competition with and among the fruit growers in the province a handsome curling trophy. It is in the form of a cup mounted on a full-sized reproduction in oak of a standard peach box, 18 inches long by 11½ inches wide by 4 inches deep, which gives some idea of the massiveness of the trophy. This cup was the Grand Challenge Trophy at the annual bonspiel of the Okanagan and Interior Curling Association held at Salmon Arm, B.C. during week commencing January 16.

As one of the conditions of the competition for the cup, the Box Manufacturers' Section have undertaken to support the same with four gold medals for the winning rink each year and a similar number of silver medals for the runners-up. The most cordial relations exist between the box manufacturers in the province and the fruit growers and shippers, who are large purchasers of various types of fruit packages and assurances have been received that the donation of this trophy by the box manufacturers as a further indication of good will toward and interest in the fruit-growing industry will still further strengthen the pleasant relations already existing.

Market for Canned Goods in Mexico

The Bulletin of the Central British Chamber of Commerce in Mexico reports: When compared with European countries, the sale of canned fruits and vegetables in the Republic of Mexico, is small, nevertheless there is a certain sale of which Canadian and other British packers should not lose sight.

Unfortunately definite import figures are not available at the present, consequently those we now give are approximate, but are based upon reliable information as the annual quantities sold in this country.

Asparagus, all varieties, 4,000 to 5,000 cases of two dozen. Canned Peas, No. 2 can, 500 cases; Canned Corn, No. 2 can, 500 cases; Tomato Catsup, Pints, Quarts and half Pints 2,000 cases; Solid Pack Tomatoes, No. 2 and 2½ cans, 300 cases; Canned Peaches, Sliced Pine Apple and Apricots, all 2½ cans, 1,000 cases; Apples, Plums, 50 cases each; Pears, 100; Jams and Jellies, all varieties with different containers No. 1 and 2, also 15 oz. glass, about 700 cases.

Packages for Argentine

It was pointed out by one of the members of the Export Club of Montreal and District at a club meeting, that before the war there was a regulation in effect that all packages going to Argentine must be numbered consecutively. Failing that, a fine of 2% of the value of the shipment was placed upon the shipper. During the war this law was suspended, but it has again become operative.

Transportation Department Bulletin

Consideration of New Forms of Bills of Lading

In connection with the export form and the Hague Rules of 1921, considerable opposition has been made at recent meetings in the United States, by the shipping public particularly, in connection with the Hague Rules 1921.

The National Industrial Traffic League has taken a very active part in connection with this matter and is at the present time gathering together considerable data and making a very careful study of the new Hague Rules with a view of having some amendment made to the Harter Act in the United States and postpone the acceptance of the Hague Rules which are at variance with the proposals as to amendments to the Harter Act. The Transportation Committee was of the opinion that these matters ought to be given careful study so that we would be fully informed as to exactly what was taking place in connection with these very important documents. It was accordingly arranged that a sub-committee be appointed from the Transportation Committee consisting of W. R. Ingram, chairman, A. H. Thorpe and R. P. D. Graham to make a careful study of both the Hague Rules and the new United States forms together with our Water Carriage of Goods Act which is patterned along the lines of the Harter Act in the United States. This sub-committee will work in conjunction with similar committees from the Canadian Traffic League, Toronto Board of Trade and any other organizations who desire to take similar action; the results of the investigation by this sub-committee to be reported to the Transportation Committee as soon as possible.

Charge for Stop-over on Grain in Transit

The Transportation Committee is pleased to advise that the Board of Railway Commissioners issued General Order No. 354 on January 4th requiring railway companies subject to its jurisdiction to file tariffs effective not later than the first day of February 1922 showing a charge of 1c. per 100 pounds for stop-over on all grain for storage, milling, malting or other treatment, this arrangement to be granted for all grain produced in Canada subject to a reasonable charge for out-of-line hauls. This decision is of great importance as it establishes a one cent charge for this service at any point in Canada and allows the use of grain grown in any part of Canada.

At the present time the charge is 2c per 100 pounds on the Grand Trunk in Eastern Canada and 1c on the C. P. R. with 1c applying generally in Western Canada. In addition to this Ontario grown or Quebec grown grain cannot be used in connection with this milling arrangement and there is no arrangement in the Maritime Provinces which should properly be put into effect in accordance with this order. The decision disposes of a complaint made by the Transportation Department of the Association against a proposal of the Canadian Pacific Railway to increase this charge to 2c in Eastern and Western Canada, this action having been taken in order to remove the discrimination complained of by the Dominion Millers' Association.

This matter was taken up with interested millers and it was pointed out that considerable data would be necessary in order to combat the statements of the railway companies. The various mills throughout the West working closely with our Division Secretary at Winnipeg prepared considerable data and this was presented at a hearing at that point. Hearings were held throughout the country and it is interesting to note that the final argument held in Ottawa was arranged for by the Association and considerable information supplied to the Board showing that the figures submitted by the Canadian Pacific Railway as to certain terminal costs in Winnipeg were not properly constructed nor properly applicable to the milling-in-transit arrangements as a whole

The millers in Western Canada stated at the hearings that an increase in the stop-over charge from 1c to 2c would mean an additional cost to them of $350,000 per annum. It is reasonable to suggest that the assistance of the Transportation Department has helped to save this sum to the millers in the West. In addition to this the reduction of the charge in Eastern Canada on the lines of the Grand Trunk Railway from 2c to 1c and the granting of the privilege to mill Ontario grain on the same basis should add considerable to the foregoing figure.

Freight Charges on International Shipments

Further correspondence has passed between the Transportation Department and the Chief Commissioner of the Board of Railway Commissioners in connection with the Association's request for particulars from the railway companies as to the amount of exchange paid by Canadian carriers to their American connection in settlement of balances due those lines.

The Chief Commissioner has stated he was not clear that the Board would be justified in demanding from the railway companies the information requested. He, however, supplied a statement showing the total amounts collected by each road in Canada covering surcharges from January 22nd to October 31st, 1921 and stated that he felt this information would be sufficient for all practical purposes.

Our object in writing the Board was to determine by comparison of the exchange paid by Canadian carriers with the total surcharge collected, exactly the position of the Canadian carriers under this arrangement. The Transportation Committee feels that we are entitled to this information and on a motion by Mr. Thorpe, seconded by Mr. Graham the Committee was requested to recommend to the Executive Council that the General Manager be requested to seek an order from the Board of Railway Commissioners requiring the transportation companies to furnish full particulars as to their international balances on freight charges since they began to collect exchange on March 1st, 1920 in order that we may determine whether or not the present surcharge is working to the advantage or disadvantage of the carriers.

The figures which have so far been supplied are very interesting and show the enormous amount represented by the surcharge. The total money collected for the period January 22nd to October 31st, 1921 is shown as $2,767,940.80. Extending these figures to a year the amount should approximate $3,600,000. As this figure represents 60 per cent of what would have been collected had the surcharge arrangements not been put into effect, or $6,000,000, it is safe to assume that the arrangement will have saved the shipping public of Canada approximately $2,400,000, at the end of the year, January 22nd, 1922.

It is also important to point out that between March 1st, 1920 on southbound traffic and May 1st, 1920 on northbound traffic, and January 22nd, 1921, the Canadian and American carriers were demanding payment of freight charges in American funds and it is safe to assume that during that period, when the exchange rate was quite high, the Canadian carriers undoubtedly reaped a considerable benefit as they were not called upon to pay their American connections in American funds. Of course the arrangement now is that they pay American connections in American funds and the 60 per cent surcharge is supposed to recoup them for any loss.

Bell Telephone Application for Increase

It will be recalled that in April, 1921, the Railway Board made an order granting the Bell Telephone Company a 10% increase in rates. In granting this increase the Board went on record as being of the opinion that the Company was entitled to an additional revenue of $2,100,000 in order to pay operating expenses and earn a fair return on its investment.

Two months after the above order was made the Bell Telephone Company made a fresh application to the Board declaring that the rates which the Board had considered would yield the additional $2,100,000 were not in fact yielding that amount, and asking that the rates should be so increased as to yield the amount in question. This statement was made, of course, on the basis of the experience of the two months that had elapsed since the April order. The additional annual revenue required was stated to be $1,473,747.

The Telephone Company's statement as to its requirements was closely analysed and vigorously attacked by counsel for Toronto and for Montreal with the result that several items were struck out, the principal one being $313,000 for income tax. The other principal lines of attack were,—

(1) That the Telephone Company's method of projection of the figures for the summer months was inaccurate and misleading, and,

(2) That the Company had made no attempt to reduce wages in conformity with the reduction of wages in general industry.

As regards the attitude of the Association, it was felt by the Transportation Committee that, in view of the great divergence of opinion between different sections, the Association should content itself with holding a watching brief.

Increase in International Express Rates

The express companies issued a revised set of block tariffs applying on international traffic effective on January 1st. These tariffs contain both advances and reductions, and the express companies have informed the Transportation Department that the adjustments were made for the purpose of realinement in view of the fact that Canadian rates, which have been advanced on two occasions within the last few years, were considerably higher to border points in Canada than the rates from the same points of origin, to border points in the United States. The express companies stated that this was due largely to the fact that their rates to and from United States had been based largely upon a combination of locals to and from the border using the lowest combination and therefore with the larger increases in the local rates in Canada when a corresponding increase in the proportion of the through

rate automatically places the through rates out of line.

On application of the Booth Fisheries Company, Chicago, the Interstate Commerce Commission ordered the American Railway Express Company, who issued the tariffs, to postpone the effective date. It is stated that this order was received by the American Railway Express Company on January 3rd and that wire advice was sent by the Interstate Commerce Commission to them at 7.05 p. m. December 31st. The same applicants wired the Board of Railway Commissioners at Ottawa on December 24th requesting postponement of one tariff, namely C. R. C. No. D-1933, which covered rates to the Chicago block only. The Board of Railway Commissioners on the 27th of December declined the application for suspension on the grounds that a prima facie case had not been made out in accordance with Section 12 of the Board's General Order No. 116. The situation thus created caused considerable confusion but the Canadian express companies have taken the stand that as our Board of Railway Commissioners have not postponed the tariffs they are in effect and, in order to secure their charges, they have issued instructions that all charges on shipments to United States must be prepaid.

The Transportation Committee is of the opinion that the General Manager should take immediate action concerning this matter with a view to having some action taken by our Board to relieve the situation pending hearing before the Interstate Commerce Commission.

It was pointed out by one of the members of the Committee that the rate from Toronto to New York on certain food products was $2.07 per 100 pounds prior to January 1st. The rate they are now compelled to pay is $2.60 and it was felt that the difference of 53c. would accrue entirely to the Canadian carriers in view of the fact that they would not be allowed to pay the American connection any more than the division of the old rate of $2.07 as the Interstate Commerce Commission recognizes only the $2.07 rate.

Appointments to Staff of Railway Board

The Board of Railway Commissioners on December 29th issued a notice to the effect that by order-in-council, the following appointments had been made to the staff of the Board.

R. Richardson, Assistant Secretary and Registrar. Geo. A. Brown, Assistant Chief Traffic Officer.

Mr Richardson has been Assistant Secretary for some time and the only change in that connection is the adding of the duties of Registrar.

Geo. A. Brown has been known under the title of Chief Clerk of the Traffic Department, there being no Assistant Chief Traffic Officer. However, his duties have been exactly the duties of the position to which he has now been appointed and since the death of J. H. Hardwell, Chief Traffic Officer, Mr Brown has been acting in that capacity. In other words he has been handling all matters which formerly came before Mr. Hardwell as Chief Traffic Officer.

Mr. Brown, has been with the Board of Railway Commissioners practically since it was started and before this time was connected with a number of different railways for quite a number of years, having risen to position of Assistant General Freight Agent of the New York and Ottawa—Ottawa and New York Railway which he resigned to take the position of Chief Clerk Traffic Department of the Board of Railway Commissioners and he had considerable to do with the organization of that Department. He is very well known by the railway traffic officials as well as industrial traffic officials. In the early days of his railway experience he was associated with Mr. Walsh with what was then known as the Canada Atlantic Railway and has therefore known Mr. Walsh for quite a number of years.

Results of "Perfect Package Campaign" Announced

Shippers of the United States made a score of 99.10% in the "Perfect Package Campaign," according to a recapitulation of the results of the movement just announced by the Joint Campaign Committee of the American Railway Association and the American Railway Express Company, which condusted the campaign throughout the country in November.

Reports of the business handled and the number of exceptions taken on packages, because of some error or defect in packing, marking or registration, were tabulated in Chicago by a corps of accountants, and took a week to complete.

During the Perfect Package Month, as November was designated, the railroads were were credited with handling 9,339,745 freight shipments, to which 101,760 exceptions were filled by the carriers. During the same period, the express company handled 10,899,-352 shipments, to which 81,070 exceptions were taken. In other words, all of the carriers handled 20,239,097 shipments, freight and express, on which 182,830 exceptions were entered by carriers, giving a national percentage of 99.10%

These figures were tabulated from reports received, up to December 22, 1921, from 1294 cities in the United States, divided into five classes, according to population. The fifty-six leading cities, with a population of 100,000 shipped out more than half the business handled by the carriers, representing 5,724,-764 shipments by freight and 7,871,455 by express, for a percentage of 95.15%.

The one hundred and fifty-six cities having a population from 25,000 to 100,000 forwarded 3,455,254 shipments by freight and express, with total exceptions filed of 37,891 for a score of 98.91%. Two hundred and fifty-four cities, with a population between 10,000 and 25,000, shipped 1,946,683 shipments, with 21,883 exceptions for a score of 98.88%. Two hundred and twenty-seven cities, with a population from 5,000 to 10,000 made 688,678 shipments, with 4,898 exceptions, for a score of 99.29%. Six hundred and one cities with a population of 5,000 and under, obtained a score of 99.10%, with 552,263 freight and express shipments, on which 3,338 exceptions were filed.

The exception reports covered errors made by shippers in the packing and marking of shipments, and in making out bills of lading or express receipts. A number of the smaller communities failed to forward their reports in time and were not inluded in the recapitulation.

The Idle Car Situation

The idle car situation for two-week periods ending January 1st and 15th show the following:

	Jan. 1st.	Jan. 15th.
Total cars on Canadian Lines	208,025	206,353
Allowance for bad order cars A. R. A. basis	14,562	14,445
Actual bad order cars	18,966	18,210
Excess bad order cars over A. R. A. allowance	4,404	3,765
Surplus cars in good order	45,333	44,928
Total Cars Idle	49,737	48,693

News from the Tariff Department

Recent Board of Customs Decisions

"Brillo" Aluminum Utensil Cleanser and Polisher consisting of pads of steel wool and a cake of soap, imported in a paper carton and sold as an entity, declaed dutiable under tariff item 252 at the rate of 27½% under the general tariff.

Re Dental Chairs for use in military and other hospitals:—

Board of Customs ruling of the 10th of September, 1918, (Appraisers' Bulletin No. 1782) cancelled and Dental Chairs declared to be dutiable under tariff item 519 at the rate of 30% under the general tariff.

Platimum Settings, per sample, to be used in the manufacture of jewellery, declared to be dutiable under tariff item 711 at the rate of 17½% under the general tariff.

Sales Tax Decisions

Declared that railroad ties of wood are classified as lumber for sales tax purposes on and after the 10th of May, 1921, Board of Customs ruling of the 13th of September, 1921 (Appraisers' Bulletin No. 2430) is cancelled.

Departmental Rulings

Weather stripping in the form of a strip of pressed felt not filled or covered by or with any woven fabric, is rated under item 564 at the rate of 25% under the general tariff. This ruling in effect on and from 22nd. December, 1921.

Briquettes made from bituminous coal screenings rated under tariff item 588 at the rate of 53 cents per ton under the general tariff.

Radiator caps for automobiles, made of brass and having an outer covering of composition resembling hard rubber, ruled to be dutiable under tariff item 352 at the rate of 30% under the general tariff.

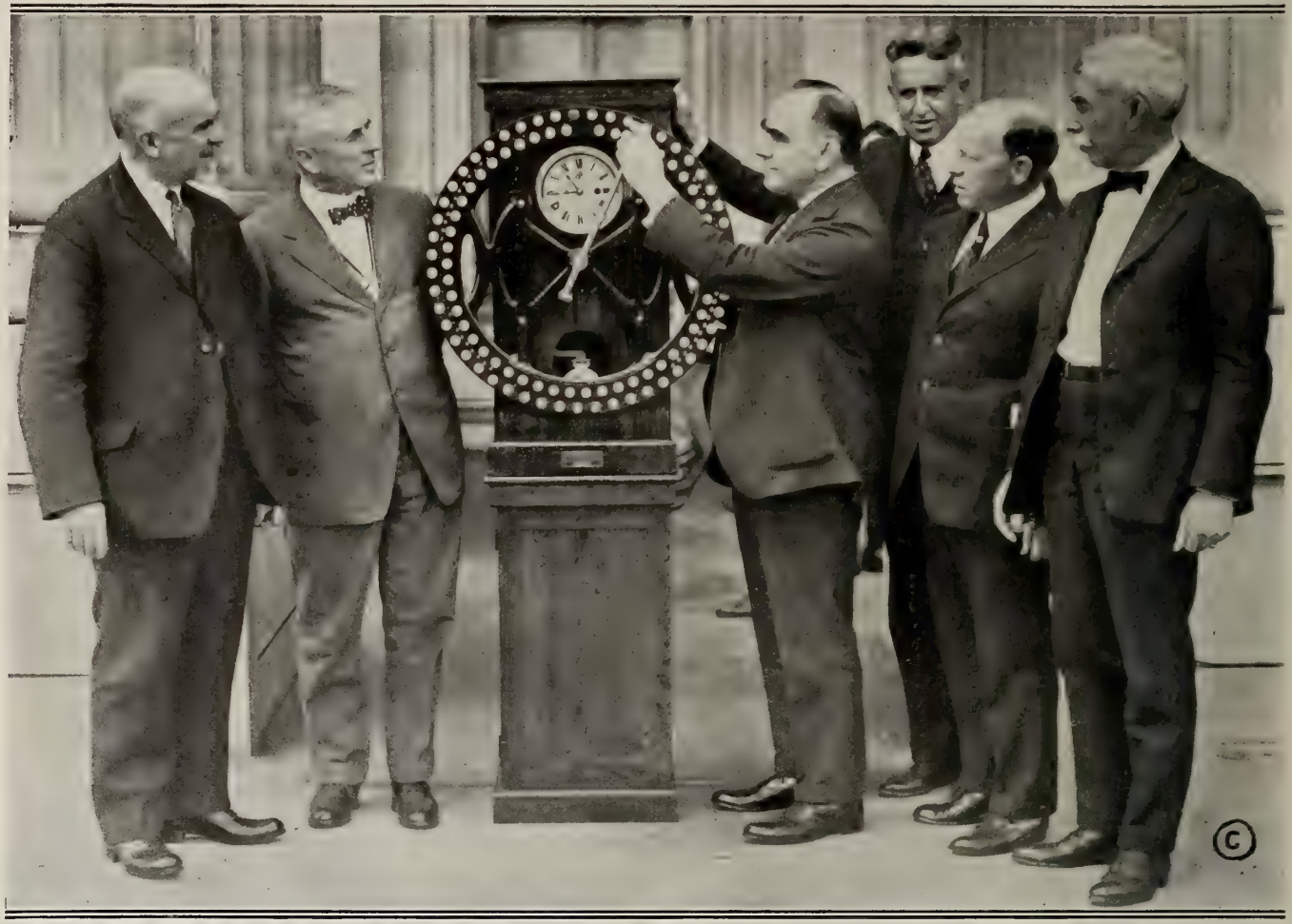
Extension of Empire Preference—Fiji Islands

The Tariff Department has just received a copy of the new law relating to customs duties in the Fiji Islands. Under this new law, effective from the 1st of January, 1922, the preference is granted in respect of goods which are the produce or manufacture of the British Empire. Generally speaking, the preference amounts to 12½%, ad valorem, rate of duty in most cases being 15% on goods which are the produce or manufacture of the British Empire, as against 27½% when imported from countries outside the Empire.

In order to be entitled to the preferential rate the goods must be accompanied by satisfactory proof that they are the produce or manufacture of the British Empire.

Members desiring further information should communicate with the Tariff Department of the Association.

INTERNATIONAL
COUNT MINUTES WHERE



Time Registration for the Law Makers of a Nation

SOUND BUSINESS PRINCIPLES apply equally to the smallest office or factory and to the business of governing a nation.

Today TIME is the big thing in every business. Forward-looking men everywhere recognize that no sound business system has any place for wasted Time. From a humble beginning thirty years ago, the Time Recorder has constantly widened its sphere of service in private business. Today it is an instrument of a thousand uses.

Following the lead of private business, progressive members of parliaments, congresses and legislatures today are making war on the **Time Waster.**

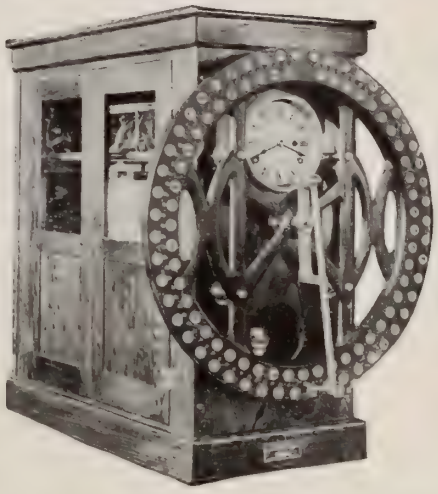
American Congressmen will soon be registering their attendance, if Representative Kissel of New York succeeds in obtaining passage of his bill introduced recently, providing for the payment of salaries to members of Congress on an attendance basis. Mr. Kissel is shown above on the steps of the Capitol demonstrating the time recorder to fellow members of the House.

Sooner or later the entire world will register all its comings and goings on the International Time Recorder.

Internationals Print the Truth About Time

TIME RECORDERS

MINUTES COUNT



Taking Your Own Measure

HOW much is a minute worth to you?

Exactly what you can make it worth to someone else. Up in Alberta is a gas well. For years it has been thrusting a great tongue of flame high in the air—wasting gas exactly like that which is metered carefully to Ontario homes and factories at a good price.

Some day Peace River gas may be metered too. When? Precisely on the day someone finds a way to make it worth something to his fellows.

And the same meter will measure the reward that will go to those who develop the well—in other words, it will take the measure of the business acumen they display in turning waste into productive channels.

In the business life of Canada gas is a trival source of wealth. Its use is narrowly limited by natural conditions.

Constantly at hand, awaiting development by Canadian business men is the greatest of all raw materials—The Minute.

Your profits in Commerce or Industry will be largely conditioned by what you can do toward turning **wasted** minutes into **productive** minutes. Whether you make mouse-traps or traction engines your big, costly item of raw material is the Working Minute—not wood or steel.

You have, Mr. Businessman, in your own business lifetime 5,400,000 minutes. The money value to you of these minutes is merely the reflection of the value you give the minutes you buy and sell.

Men of Genius make minutes count, and minutes that count are always worth counting. Thomas A. Edison in his seventies is not only a believer of accurate Time registration but practices it himself each day.

If you are satisfied to burn up the working minutes you buy you can feed them easily to the bonfire of Guesswork.

If you hope to make the working minutes you buy worth while to your fellows and equally worth while to yourself, our advice is: MEASURE THEM.

When you take the measure of a minute you take the measure of your own earning capacity in business.

Time Recorder Prices Back to Bed-Rock

These reductions will range from $10 to $85, according to style and type of instrument. Effective immediately.

The High Cost of "Supposing"

The Time Schedule in your office or factory is merely a program of the hours your staff is SUPPOSED to work.

Such a program if carried out is important; but if not carried out as valueless as a last year's bird's nest.

Can you say with certainty what proportion of your SUPPOSED working hours are transformed into ACTUAL hours worked?

Here is the high cost of supposition in the case of one business house employing 100 persons: Average time lost: 10 minutes a day. Total loss in one year: 5,000 hours, which at an average of 40c. means $2000.

The Time Schedule is a SUPPOSITION. The Printed Time Record is an ACTUALITY.

Internationals are mechanically accurate. They give an indisputable printed record, equally fair to employer and employee; reduce payroll clerical work 90 per cent and promote harmony by making every employee his own Timekeeper.

INTERNATIONAL BUSINESS MACHINES CO., LIMITED

FRANK E. MUTTON, Vice-President and General Manager

Head Office and Factory, ROYCE AND CAMPBELL AVENUES, TORONTO

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Confidence in Situation Feature at Annual Meeting of Royal Bank of Canada

Sir Herbert Holt, President, Points Out That Canada, After Accepting Every Obligation Arising Out of the Conflict, is Stronger Materially Than Before the War.

Edson L. Pease, Vice-President and Managing Director, Draws Attention to Helpful Part Played by Banks During Period of Exceptionally Stress---Business Demoralization Averted in Canada by Banks.

C. E. Neil, General Manager, Draws Attention to Thoroughness of Bank Audit---Every Credit in Excess of $25,000 Must Be Approved by President and Board of Directors.

A LARGE gathering of shareholders were present at the annual general meeting of shareholders of the Royal Bank of Canada held at the head office here. Keen interest was displayed in the remarks of the president, vice-president, and general manager, especially so those of the latter, wherein he explained the close manner in which the affairs of the bank were scrutinized by the directors at Montreal at various points throughout the country, and by the bank's auditors.

The annual financial statement of the bank was presented to the meeting and approved. Short addresses of thanks and appreciation to the directors, the officers and the staff of the bank were made during the progress of the meeting, and replied to by the officers.

Sir Herbert S. Holt, chairman, before his survey of the general situation, referred to the Bank's position, saying: "I first desire to emphasize the General Manager's statement that all bad and doubtful debts have been fully provided for. Usually the profits of the year are ample to provide for all bad and doubtful debts. Should they not be sufficient, we have a contingent fund, independent of the surplus fund, accumulated during prosperous years, to fall back upon. I have further to say that the Managing Director, the General Manager and Executive Officers of the bank are officials of long experience and proved ability, and that the affairs of the bank receive the unremitting attention of myself and your directors. I have no hesitation in stating that, in my opinion, the organization and system of supervision in this bank are unexcelled."

Economy Strongly Urged

Sir Herbert took a very hopeful view of the outlook in Canada, at the same time emphasizing the importance of economy, both in public and private life. Dealing with the general situation, Sir Herbert said:

"Canada, after accepting every obligation arising out of the conflict, is stronger materially than before the war. We have our debt and our railway and shipping problems, all of which will tax the wisdom of our statesmen, but on the other side of the scale we must place the growth of towns and cities, industrial expansion, the increase in savings, and the fact that most of our bonds are held in the Dominion. Compared with conditions in Europe, we are fortunate indeed.

"In conclusion, I wish to say that the scope and character of the existing depression in world trade, forbid us to hope for an early or easy return to prosperity. Yet I do not think that we in Canada need feel any great apprehension as to the future. The unprecedented decline in prices, which was the worst feature of the last year and a half, can hardly be repeated. I trust that the period immediately before us will be one of salutary economy, both in public and private life, the best preparation for renewed prosperity."

Discussing the general phases of the situation, Sir Herbert said, in part:

"The year 1921 will long be remembered as a period of drastic deflation and liquidation throughout the whole world, the aftermath of the war. This deflation was under way when we last met. While it is not yet ended, each month brings us a nearer approach to normal. The heavy decline in the price of commodities and check in public buying found many of our manufacturers and merchants in the possession of large unsaleable stocks purchased at boom prices. Obviously the transition to more normal values as attended by much loss. The fact, however, that there were one thousand fewer failures in Canada in 1921 than in 1915 may be attributed to the abnormal profits accumulated during the war.

Managing Director's Remarks

Edson L. Pease, the Vice-President and Managing Director, in his address, dealt more particularly with the affairs of the Bank, and the principal developments within the Do-

minion. Mr. Pease also referred to the situation in Cuba and South America, saying in this regard:

"While Cuba suffered through the collapse in the price of sugar, I have no misgivings regarding her future prosperity. She was prosperous before the war when sugar ruled about 2c a pound. She has demonstrated in the past her ability to produce sugar at a cheaper rate than any other country. She enjoys the natural advantage of soil and climate and possesses the most modern sugar mill installation in the world. A great advantage is her proximity to the American market. The country has neither currency problems nor railway deficits to retard her recuperation and only a small war debt to the United States of $10,000,000, on which she is paying interest.

"In keeping our doors open at all times, and under circumstances that compelled the Government of Cuba to declare a moratorium which ultimately resulted in the suspension of three local joint stock and several private banks, we have justified the confidence of our Cuban customers and added to Canada's prestige throughout the Islands of the Carribbean.

"The year's business of our branches in South America, which were not established until after the boom, has been highly satisfactory and free from loss. The quality of the business we accept is exceptionally high class, consisting in great part of the purchase of bills of exchange representing produce exports under "Bankers' Letters of Credit."

Discussing the general Canadian situation, Mr. Pease said, in part:

"The year just ended has proved a very trying one for the commercial community and for the banks. Never before have we been confronted at home and abroad with so many difficult problems and such adverse conditions. The rapid and severe recession in the prices of all commodities and the lack of purchasing power involved heavy losses in inventories and a great shrinkage of domestic and international trade."

In conclusion, Mr. Pease dealt briefly with the general outlook, when he said:—

"The outlook for the coming year is hopeful. It is generally believed that the worst of the depression is past and that a gradual imporvement will set in. Canada's progress depends largely upon the satisfactory adjustment of international economic questions, as we are closely linked with the outside world."

"Bank Audit Most Thorough; All Credits Must be Approved By President and Directors"

—C. E. Neill, General Manager, Royal Bank, at Annual Meeting

THE strongest and most important statement ever presented, relative to the thoroughness of bank inspections by auditors and the policy of supervision of credits, was made by C. E. Neill, General Manager of The Royal Bank of Canada, at the annual meeting held at the Head Office.

Dealing with the general business of the Bank and the procedure followed by the auditors, Mr. Neill said to the shareholders:—

"I wish particularly to draw your attention to the fact that full provision has been made for all bad debts, and that in addition, adequate amounts have been set aside to provide for any accounts which may be considered in the doubtful class.

"In view of the discussions which have recently taken place regarding the obligation of auditors of banks appointed under the provisions of the Bank Act, it is proper that you should be informed that the auditors appointed by the shareholders of this bank not only certify to the correctness of the Balance Sheet, but they also approve of the value of the banks assets as stated therein. The representatives of the auditors, who conduct their investigations of the bank's business throughout the entire year, have access to the statements, correspondence and inspection reports relative to all loans required, and their certification of our Balance Sheet is made only after a full examination of all credits granted to customers. In cases where there is any doubt as to the value of a debtor's account, the amount set aside by the bank to take care of any possible loss is approved by the auditors as being sufficient. Every facility is afforded them to examine each and every account in the bank, and they are encouraged to criticise and make the most detailed investigations of every debt due the bank, with the relative security.

"As an indication of how closely the President, Managing Director and Directors of this bank at Head Office control the affairs of the bank, I may tell you that every credit granted of $25,000 and over is approved by them, and there are no loans at any office of the bank to-day in excess of $25,000 which have not been approved by the Directors at Head Office. Moreover, committees of resident Directors of the bank at Toronto, Winnipeg, Halifax, Quebec and St. John supervise and recommend all loans in their respective districts and, in addition, are informed of all credits authorized in other distrists."

Industrial Relations Bulletin

Downward adjustments of wages in agreements are reported in increasing numbers throughout the United States. In general, these adjustments are not being resisted though a certain number of strikes have occurred. Thus in Chicago the Building Trades' award of Judge Landis is being resisted by the unions with the result that a Citizen's Committee for the enforcement of the Award has made public a statement that in all trades where unions continue to resist the award, open shop conditions will be introduced.

Unemployment in Canada. The volume of employment as reported by 5,566 firms employing 667,681 workers continued to decline beginning the fortnight ending December 17th, when the index number stood at 85.2 as compared with 87.2 at the beginning of the month and with 97.7 on 18th December, 1920. The following statement shows the situation by Provinces:—

	Relative Weight	Week of Dec. 3 1921	Week of Dec. 17 1921	Week of Dec. 18 1920
Maritime Provinces	8.8	89.5	83.1	106.3
Quebec and Ontario	68.8	85.1	83.6	96.1
Prairie Provinces	14.4	95.6	93.2	103.1
British Columbia	8.0	88.9	87.9	92.2
CANADA	100.	87.1	85.2	97.6

In the manufacturing industries over 3,600 persons were released during the fortnight ending 17th December,—a contraction of 1%. Boot and shoe, and pulp and paper, factories continued to employ more help while important losses were again reported in saw mills, food factories, and crude, rolled and forged division of iron and steel.

Cost of Living. The Detroit Housekeepers' Association has determined that the cost of living in Detroit has dropped 23.9% since June, and a family of 5 whose minimum living expenses ten months ago were estimated at $2,093.88 for the year can live comfortably now on $1,593.24.

Bradstreet's Food Index, based on wholesale prices per pound of 31 articles of food was $2.87 for week ending 14th January, 1922, as compared with $2.89 the preceding week and $3.42 for the week ending January 13th, 1922.

The United States Bureau of Labour Statistics report on changes in cost of living shows the following decreases:—

	June, 1920 to Dec., 1921	Sept. 1921 to Dec., 1921
Chicago	19.7	1.7
Detroit	22.7	3.0
New York	18.7	0.9
Philadelphia	18.4	1.0
Washington	19.0	1.9

The General Electric Company, Lynn, Mass., will request all persons connected with the plant to contribute 1% of weekly earnings to provide a fund to relieve former and present employees from suffering or want during the winter.

Bills have been introduced in the Massachusetts Legislature, which convened on the 4th January, providing for insurance against involuntary unemployment.

Australian Workers Unions have voted 7 to 1 in favour of one Big Union.

Strikes in Canada in November.

Month	Number of strikes	Number of Employees	Days lost
October, 1921	16	2,229	54,704
November, 1920	21	2,295	27,269
*November, 1921	18	3,950	98,099

*Of the 18 strikes in existence in November, 2 began in that month, involving loss of 50,000 days; the 16 previously in existence involved loss of 48,099 days.

The Dominion Coal Company, Sydney, N. S. have notified the 8,000 miners working in their mines that on January 1st, 1922, day rates and contract mining rates would be on the basis effective January 1st, 1920 less 25% subject to minor adjustments to certain individual rates.

Appointed to the Advisory Commercial Committee

At a meeting of Toronto Branch Executive on January 4, George Brigden, Brigdens, Limited; W. C. Coulter, Booth-Coulter Copper & Brass Co., Limited and W. H. Shapley were appointed representatives of the Toronto manufacturers on the Advisory Commercial Committee of the Board of Education for 1922.

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President Fisher Addresses Orillia Club

During his recent visit to Ontario, President Fisher addressed meetings of the men's and women's Canadian Clubs of Orillia and received a very cordial welcome to this progressive manufacturing town. In the course of his remarks on "Some Canadian Problems", he took advantage of the announcement that the next annual meeting of the C. M. A. would be held in St. Andrew's, N. B. to emphasize the necessity for the people of the different provinces becoming better acquainted with each other. People in Ontario, he said, did not know as much about Eastern Canada as they should and he urged his hearers to come down to the Maritime Provinces and get acquainted.

Among the problems, which Mr. Fisher discussed, was the transportation problem. He declared that it was absolutely necessary in the interests of eastern manufacturers that better freight rates should prevail. Few of the natural products of the Maritime Provinces were needed in the Western part of Canada but manufactured goods were. Some 250 or 300 manufacturers sent their goods to Quebec, Ontario and the West and it was highly desirable that this movement should be encouraged.

On the problem of the national debt, Mr. Fisher was optimistic, referring to the progress of the last hundred years and declaring that our difficulties to-day were not to be compared to those which had been met and overcome by the pioneers.

Relations with the United States were also discussed. In this connection, he though it was not good for Canada that too much of our raw natural products should be exported. They should be utilized in Canada and give employment to Canadian labor. It should also be noticed that the United States was erecting a tariff wall against us. As for the American branch factories, he thought that they should be welcomed, as Canada needed all the money that could be brought into the country for her development.

In conclusion, Mr. Fisher urged the greater use of Canadian ports in exporting and importing goods and, rates, services and deliveries being equal. Canadians should give the preference to their own transportation organizations.

Successful Annual Banquet at Peterborough

Peterborough Branch of the C. M. A. held its annual banquet on the evening of January 24, the proceedings being characterized by that freshness and novelty for which the Branch is noted. The president of the Association, W. S. Fisher, was guest of honor and accompanying him were J. E. Walsh, general manager; J. R. K. Bristol, manager Tariff Department; H. W. Macdonnell, secretary Industrial Relations Department and the following members from near-by points,—J. McCrae, McCrae Machinery & Foundry Co., Lindsay; G. Flavelle, Flavelle's Limited, Lindsay; W. D. Plant, Hastings Foundry Limited, Hastings.

A novel feature of the occasion was the presentation to each of the guests of samples of Peterborough's products as a memento of the occasion. These included small bag of flour manufactured by the Peterborough Cereal Co.; silk union jack, J. J. Turner & Sons; roll of wax paper by the Canadian Nashua Gummed and Coated Paper Co.; two small paddles by the Peterborough Canoe Co.; a watch fob by B. F. Ackerman Son & Co.; a novel business card illustrating a watch by the Western Clock Co.; steel tape line watch fob by De Laval Co., Limited; set of keys by Peterborough Lock Co.; a small blanket by Canadian Woollens Limited. Apart from these the president was the exclusive recipient of a huge brass key bearing the inscription "Peterborough" and "Welcome", made by the Peterborough Lock Company.

Mr. Fisher, after expressing his appreciation of Peterborough's hospitality, referred to the valuable work being done by the C. M. A. He then emphasized the problems lying before the Canadian people in building up a great nation from its widely scattered units. On the question of industrial depression, he urged the application of courage and enterprise, contrasting present-day difficulties with those faced and overcome by the pioneers. With the country's vast resources, there was no room for pessimism. Mr. Fisher had also a word of admonition for the ladies, urging them to see that their purchases were Canadian goods so that employment might be assured to Canadian workpeople.

Mr. Walsh gave an outline of the scope of the C. M. A. organization and told of the work it was doing through its various committees and departments. Messrs. Bristol and Macdonnell explained the functions of their departments and dealt with some of the important questions which were at present being handled.

S. R. Armstrong, industrial commissioner of Peterborough, in a brief address drew attention to the gratifying position of the Peterborough Branch, it being the first to acquire a 100 per cent. membership.

J. M. McCrea, G. Flavelle and W. P. Plant replied to the toast to the visitors and W. R. Breyfogle and W. A. Richardson moved and seconded a vote of thanks to the C. M. A. officials for their addresses.

The chair was occupied most acceptably by J. J. Turner, chairman of the Branch, and between fifty and sixty Peterborough manufacturers and business men were present.

Meeting of Galt Branch

The inaugural meeting of the Galt Branch of the Canadian Manufacturers' Association was held in the Galt City Club on the evening of January 18th, and was an entire success.

The following officers were elected for the remaining portion of the fiscal year ending in May:

Chairman—Col. A. J. Oliver, of the R. McDougall Co. Ltd.

Vice-Chairman—Geo. E. Fisher of the Canadian Brass Co., Limited.

Sec'y.-Treas.—R. L. Pollock of the Shimer Cutter Head Co., of Canada, Limited.

As regards the Executive Committee of the Branch, the selections of the Nominating Committee were unanimously approved and the following gentlemen were elected to office: Col. A. J. Oliver, W. G. Fallon, A. R. Goldie, J. E. Gardiner, John Catough, H. C. McLaughlin, J. Stauffer, C. A. McCormick, Geo. E. Fisher, Robt. L. Pollock.

In the addresses which followed, W. C. Coulter, Chairman of the Ontario Division, welcomed the new branch to the Canadian Manufacturers' Association, pointing out that if the number "seven" was a good omen, the members might consider themselves fortunate, Galt being the seventh branch to be established in the Ontario Division. He urged the members to take an active interest in Branch and Association work, pointing to the fact that in this, as in all other work, the resultant benefits were in just proportion to the effort thought expended.

H. W. Macdonnell, Secretary of the Industrial Relations Department, J. McIntoch, Secretary, Trades Sections Department, and H. Macdonald, Legal Secretary, outlined the functions of their departments and told of the services they were rendering to manufacturers.

The Chairman then called upon the newly-elected officers of the Galt Branch. Both Mr. Fisher, the Vice-Chairman, and Mr. Pollock, the Secretary, urged co-operation among the members of the Branch and promised individual support.

After suggesting that those present should attend the Ontario Division meeting in Hamilton the next day, the Chairman then declared the meeting adjourned.

Among those present were:—Col. A. J. Oliver, Messrs. S. L. Clark, J. R. Ferguson, J. Frank Roelofson, J. S. McGaw, T. G. Elliott, F. D. Palmer, Jos. Stauffer, Geo. A. Dobbie, W. H. Shreiber, W. Clark, F. R. Delafield, R. L. Pollock, Wardlaw Vair, W. P. Austin, W. P. Rigsby, L. W. Smith, R. W. Roelofson, C. K. Jansen, I. Schwartz, E. B. Fewings, R. K. Serviss, B. H. Neill, W. C. Coulter, H. Macdonald, J. M. McIntoch, H. W. Macdonnell and O. C. Pease.

Trip to British West Indies Arranged

Success has attended the efforts of the Association in organizing a representative party of members to undertake a tour of the British West Indies. Between twenty and thirty manufacturers will leave Halifax on February 10, travelling according to the following schedule:—

Leave	Halifax	C.G.M.M.	Feb.	15th.
Arrive	Nassau	"	Feb.	19th.
"	Kingston	"	Feb.	25th
Leave	Kingston	Megantic	Feb.	27th.
Arrive	Panama Canal	"	Mar.	2nd.
"	La Guaira (Caracas)	"	Mar.	5th.
"	Port of Spain (Trinidad)	"	Mar.	7th.
Leave	Port of Spain (Trinidad)	R.M.S.P.	Mar.	17th.
Arrive	Demerara	"	Mar.	19th.
Leave	Demerara	"	Mar.	23rd.
Arrive	Trinidad	"	Mar.	26th.
"	Grenada	"	Mar.	27th.
"	St. Vincent	"	Mar.	27th.
"	Barbados	"	Mar.	30th.
"	St. Lucia	"	Mar.	31st.
"	Dominica	"	Mar.	31st.
"	Montserrat	"	Apr.	1st.
"	Antigua	"	Apr.	1st.
"	St. Kitts	"	Apr.	2nd.
"	Bermuda	"	Apr.	7th.
"	St. John, New Brunswick	"	Apr.	11th.

C. K. Howard, general tourist agent, Canadian National Railways, will accompany the party to look after transportation. The Canadian Government will be represented by C. H. Payne, secretary of the Commercial Intelligence Branch, Department of Trade and Commerce.

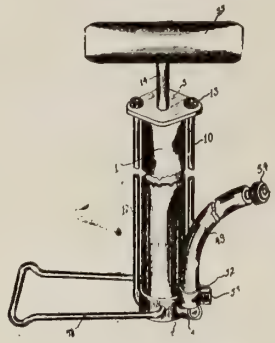
The purpose of the trip is, of course, to make a study of the West Indian markets and to establish friendly personal relations with the business men of the Islands. The recent enactment of preferential tariff arrangements between Canada and the West Indies renders such a visit at the present time particularly desirable.

Correction of Advertisement

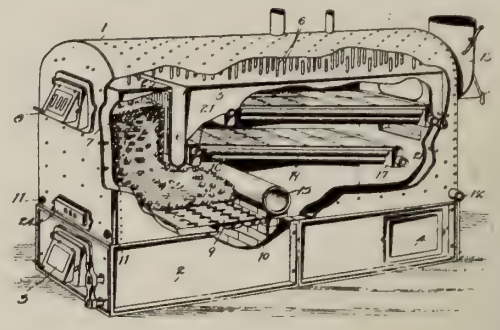
In the advertisement of the Hamilton Gear and Machine Company which appears on page 6 some mistakes have occurred in the table of gear data. The first three columns of this should read as follows:—

1.000	1.414	1.414
1.075	1.362	1.464
1.150	1.312	1.509
1.225	1.264	1.549
1.300	1.219	1.585
1.375	1.176	1.617
1.450	1.135	1.646
1.525	1.096	1.672
1.600	1.059	1.696
1.675	1.025	1.717
1.750	.992	1.736
1.825	.961	1.754
1.900	.931	1.770
1.975	.903	1.784
2.050	.876	1.797
2.125	.851	1.809
2.200	.828	1.821
2.275	.805	1.831

PATENTS FOR SALE

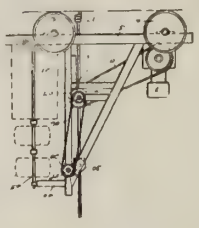


AUTOMOBILE TIRE PUMPS: This invention relates to automobile tire pumps and the principal object is to provide an apparatus of the character described, in which a valve is automatically actuated to regulate the suction and pressure of air to the pump proper. A further object of the invention is to provide a positively operated pump, capable of maintaining a maximum degree of air pressure. For full particulars regarding sale of Canadian patent write to Mr. Wm. H. Calder, Stirling, Ont.

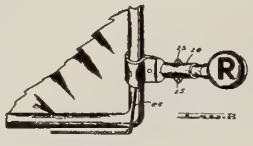


BOILERS: This invention relates to a boiler construction and constitutes a boiler having inner and outer shells rigidly connected in spaced relation to form a water chamber between them, a bridge wall extending transversely of the inner shell and dividing the interior of the shell into a combustion chamber, and a heating chamber, a water leg lying on the bridge wall and communicating with the water chamber at its end, the inner shell dipping downwardly to near the grate and then upwardly between the water leg and the front of the inner shell to form a magazine wall, and water tubes arranged within the heating chamber and communicating with the water chamber, said tubes being arranged in sections, each section consisting of casings divided horizontally into upper and lower compartments, the upper compartment of each casing communicating at one end of the casing with the water chamber and the lower compartment of each casing communicating at the other end with the water chamber, and a series of water tubes connecting the corresponding chambers of each casing, the arrangement of the connections of each casing being opposite to those of the other casing. For full particulars, write Mr. Michael E. Herbert, care Herbert Boiler Company, Root and LaSalle Sts., Chicago, Ill., who has several Canadian patents similar to the one described above.

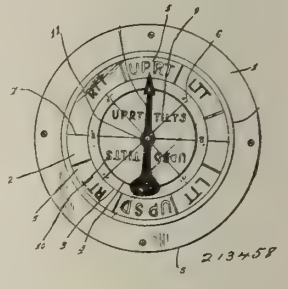
FENCING MACHINE. This invention relates to fencing machines comprising a supporting frame, a vertical shaft, an auger carried by the shaft, a threaded extension of said shaft, a gear wheel threaded upon said thread extension, a gear wheel splined upon the shaft and held against vertical movement, a horizontal shaft, a gear wheel carried by the horizontal shaft and meshing with the gear wheel that is splined upon the vertical shaft, a second horizontal shaft, means for driving the last named horizontal shaft from first named horizontal shaft and means for driving the first named horizontal shaft from the motor, bevel gear wheels meshing with the gear wheel that is threaded upon the extension of the vertical shaft, clutch elements carried thereby, shiftable clutch sleeves co-acting with said clutch elements and gear wheels carried by said sleeves and meshing with gear wheels upon the second named horizontal shaft. Write M. F. A. Ahlstram, Absaraska, N.D., who has Canadian patent for sale.



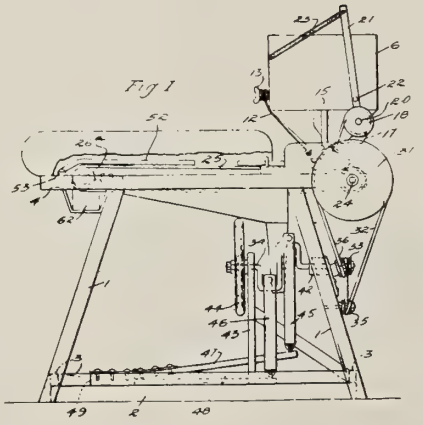
ELECTRIC SIGNAL DEVICES. This invention relates to electric signal devices for automobiles and consists of a novel arrangement of parts as will be hereinafter fully described. The object of our invention is to provide a signalling device which is automatically thrown into connection by the turning of the steering rod while turning the gear in the usual manner. A further object is to provide novel construction for the signal which is simple in make up and should be manufactured at a most reasonable cost. Write Mr. David N. Plant, 120 Charlott St., Canandaigua, N.Y., regarding sale of Canadian patent.

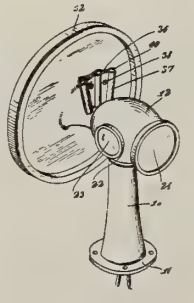


AEROPLANE INDICATORS. This invention relates to improvements in aeroplane indicators. It is well known in flying that aeroplanes tilt from one side to the other, especially when banking, spiralling and flying, and under many other circumstances known in the art of flying upside down and under such circumstances the pilot is unable to determine the amount of tilt that is on his machine. The objects of the present invention are to provide a suitable indicator which will be mounted on an aeroplane in front of the pilot, so that the said indicator will be at all times under the direct observation of the pilot, who will consequently be able to tell at a glance the degree and direction of tilt of his machine. Further objects are to render the indicator fool-proof, but simple in construction and not liable to go out of repair. For further information, write Mr. Ivan Rainey, P.O. Box 222, Gull Lake, Sask., who has Canadian patent for sale.



BEAN SEPARATOR. This invention relates to bean separators and comprises in combination a bean separater, a frame, a conveyor mounted in said frame, a hopper arranged above said conveyor, a sliding gate for said hopper, rotary force feed mechanism arranged within said hopper, chutes arranged beneath said conveyor to receive the matter travelling longitudinally or laterally thereover, and two pairs of arms arranged immediately above said conveyor, said pairs of arms being spaced away from each other. For full particulars regarding sale of Canadian and United States patents, write to Mr. Leonard Kundinger, Sebewaing, Michigan, U.S.A.

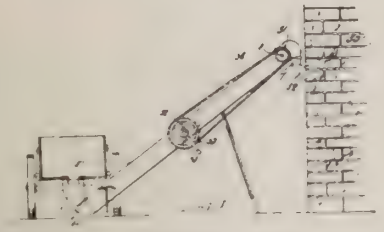




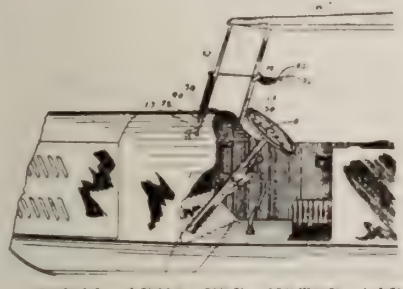
MIRROR, FLAG AND LAMP HOLDER.— This invention relates to mirror, flag and lamp holders comprising in combination with a tubular standard and a hollow head formed therewith, of lighting means carried in said head, lens in said head through which the rays of said lighting means may show, a mirror adjustably attached by said head, and means whereby said mirror may be held in an adjusted postion. Write Mr. W. Leuckert, 31 Nassau Ave., Astoria, L.I., N.Y. who has Canadian patent for sale.

Harold C. Shipman & Co., Patent Attorneys, Ottawa, Canada

PATENTS FOR SALE---*Continued*



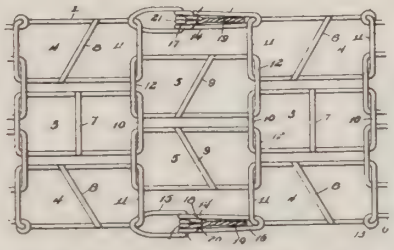
GRAIN ELEVATOR: This invention relates to improvements in grain elevators and the principal object is to provide a device of the character set forth, which is adapted for connection to grain carrying vehicles, whereby the grain may be conveyed or elevated into the storage elevator or grain car. A further object of the invention is to provide a grain conveyor, the elevating mechanism of which is automatically operable and which is so constructed as to be readily transferred from place to place. Another object of the invention is to provide suitable knock-down supporting means for the elevator. Write Mr. Orlando H. Brown, 1327 Arm Street, Victoria, B. C., who has Canadian Patent for sale.



SIGNAL ARMS FOR MOTOR CARS: This invention relates to improvements in automobile signals the principal object of which is to provide a device of the character described whereby the driver may signal his intended movement so as to be visible in the front, side or rear. A further object is to provide a device of the character described whereby the controlling member is readily accessible to the driver. A still further object is to provide a device of the character described whereby the light positioned on the outer extremity of the signal may be automatically illuminated upon the raising of the same. Write the inventor, Mr. M. G. Ransford, P. O. Box 128, Clinton, Ont., who has Canadian patent for sale.



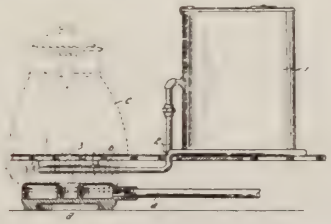
COOKING DEVICE. This invention relates to improvements in cooking devices and comprises in combination a cooking device including two handled elements pivotally connected between their ends, a laterally disposed body on one of said handles adapted to hold and give shape to the paste to be cooked, and a laterally disposed ejector within the body and rigid with the other of said handled elements, said ejector being movable rearwardly in said body to an inner inoperative position or forwardly in the body for ejecting the cooked article. For full particulars in regard to the sale of Canadian patent, write to the inventor, Mrs. Kate A. Weisgarber, of Vibank, Saskatchewan, Canada.



GRIP CHAIN FOR TIRES: This invention relates to a novel and improved grip chain for tires, the primary object of the invention being to provide a grip chain which will afford a firm and secure gripping action and which will operate with a minimum degree of wear and tear upon the tire. A further object of the invention is to provide a grip chain which will have a wide range of radial flexibility and which will operate to grip the road or street surface on both transverse and oblique lines in such a manner as to prevent skidding or sluing. Canadian and United States patents for sale. Apply to Mr. Frank F. Griffin, Monroe, New York, U.S.A.



LAMP CHIMNEY HOLDER. This invention relates to improvements in lamp chimney holders and comprises the combination with a lamp chimney having oppositely disposed lugs on its lower end, of a base, oppositely disposed sockets on said base for the reception of said lugs to lock the chimney upon the base, and an upwardly extending finger on said arranged adjacent each socket for frictional engagement with said chimney and said fingers being arranged in the path of movement of said lugs to prevent movement of said lugs in one direction when they are received in said sockets. Mr. Lemuel C. Gay, of Bolivar, Tennessee, U. S. A. will be pleased to receive enquiries regarding the sale of his Canadian patent.



CULINARY HEATER: This invention relates to improvements in culinary heaters and comprises in combination a water heater, the combination with a burner and an openwork kettle supporting grid overlying the burner in spaced relation thereto, of a cylindrical water tank supported in a plane above that of the grid and at one side thereof, a pipe coil disposed in a horizontal plane in the space between the burner and grid, an up-flow pipe leading from one end of the coil to one side of the tank some distance above the bottom thereof and the return flow pipe leading from the opposite side of the tank near the bottom thereof to the other end of the coil, said return flow pipe having a substantially semi-circular portion thereof extending around one side of the periphery of the tank, portions of the up-flow and return pipes between the tank and coil being arranged side by side in close proximity to each other to impart heat from one to the other, the semi-circular portion of the return flow pipe fitting around the base of the tank and the juxtaposition of the portions of said pipes between the tank and coil serving also to economize in space whereby the tank and circulating pipes may be made as a compact unitary article of manufacture. Write Mr. A. D. Theobald, Cuyler, N.Y., U.S.A., who has Canadian and United States patents for sale.

TWINE HOLDERS: This invention relates to a twine holder comprising a casing formed with longitudinal channels, a cross-bar secured to the top of said casing, a base plate for said casing, twine roll holding member mounted on said cross-bar, a roller mounted in the upper end of the said casing, one of the side walls of said casing formed with an opening, a pin extending transversely across said opening, a friction plate arranged contiguous to said opening, a weight moveable in one of said casing channels, an eyelet element attached to said weight, and the twine from the roll upon the holding member adapted to pass downwardly through one of said casing channels and through the eyelet of the said weight and upwardly for enlargement engagement with the said roller, the free end of the twine being adapted to pass out of an opening in the base plate and when pulled to elevate the said weight in the first mentioned channel. Write Mr. A. E. Osterberg, P.O. Box 391, Norway, Michigan, U.S.A., for full particulars regarding sale of Canadian patent.





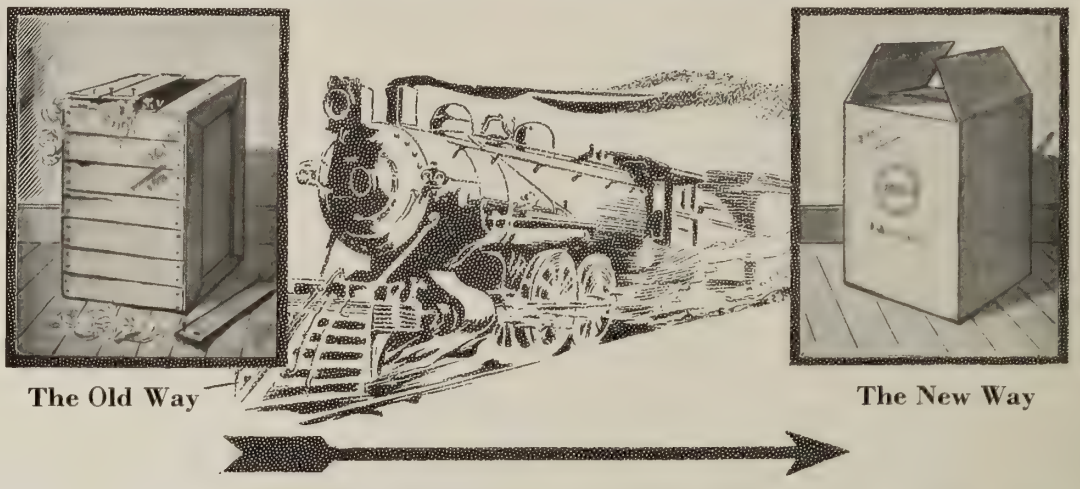
RAILWAY RAIL JOINTS: This invention relates to improvements in rail joints. The principal object is to provide a joint which is efficient in use, economical to manufacture and which may be readily positioned or dismantled. A further object is to provide a joint that will hold the bolts of the same in position if any of them should break. Write Mr. John Demeter, P. O. Box 129, Fort Francis, Ontario, who has Canadian patent for sale.



PISTON RING REMOVER AND INSERTER. This invention relates to improvements in piston ring removers and inserters and comprises in combination a tool comprising a curved plate-like body, a fixed handle formed on one end of the said body, a longitudinally disposed slot positioned in the said body, a pocket member stamped up on the said body in alignment with the said longitudinal slot, a slidable pocket disposed in the said slot, a handle formed outwardly from the said slidable pocket and means connecting the said slidable pocket with the last said handle to permit relative sliding movment to the said slidable pocket. Write the inventor, Mr. Victor A. Nelson, Kenwood Hotel, Kenton, Portland, Oregon, U.S.A., who has Canadian and United States patents for sale.

Harold C. Shipman & Co., Patent Attorneys, Ottawa, Canada

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Canada's Industrial Expansion

A RECORD OF PROGRESS

New Tire Factory Making Progress

THE Gregory Tire & Rubber Company, Limited, are the only industry of their kind west of the Great Lakes and during the short time in which they have been in operation they have built up a strong organization and have made good connections throughout the Canadian West.

Their plant, illustrated below, is located at Port Coquitlam, British Columbia, a city near Vancouver which has every prospect of developing into an important industrial centre. The plant is built of reinforced concrete and equipped with modern machinery placed in such a manner that the convenience of the workers is combined with an efficient co-ordination of processes.

The large main building has been designed so as to be the first unit of a larger scheme of manufacturing which is contemplated for the future. The power house is complete in every detail and it, too, has been constructed with a view to the ultimate development of the plant to many times its present capacity. The site of the factory is beside the main line of the C. P. R. and comprises eleven acres, lying just west of the Coquitlam River.

At present the company are specializing on tires and tubes but their plans for extension include the production of many other rubber products. For the manufacture of tires they have a most advantageous situation as raw materials such as crude rubber, Egyptian cotton, etc., are imported direct from producers across the Pacific. Only the best plantation rubber is used, and this is compounded according to a secret formula discovered by Morton Gregory, which adds to the life of the rubber. Only long fibre Egyptian cotton is used in the fabric and an extra ply is added in all sizes of tires.

The company started with a staff of about a dozen workers in February, 1921, and now have a working force of about one hundred.

New Flour Mill

Copeland Flour Mills, Limited, to Operate Soon

A new flour mill which is being erected at Midland, Ontario, by the Copeland Flour Mills, Limited, will have an initial capacity of 1200 barrels of flour and at least 100 tons of feed. The building will be large enough to handle 3000 barrels of flour a day.

The new mill is constructed of concrete and brick and is 56 x 196 feet and seven storeys high. It will cost in the neighbourhood of $350,000 and the company will have about 50 employees. It is hoped to have the new plant in operation towards the latter part of February.

Loose Leaf Devices

S. R. Hart & Company, Limited, Enlarging this Department

As loose leaf devices are being increasingly used by modern business houses, S. R. Hart & Company, Limited, Toronto, have decided to operate this branch of their business as a separate department. They have established a complete line of devices suitable to every class of accounting which they will carry in stock. They will also carry a large range of special forms designed to meet the requirements of the average business house, and also the most modern and complete equipment for machine bookkeeping.

The company will manufacture all these devices in their own factory and will endeavour to supply material that will stand up under rough usage. They will also be prepared to offer advice on any special forms required as they have the experience of firms in all lines of business in Canada available.

INDUSTRIAL DEVELOPMENTS OF 1921 ILLUSTRATED



New Plant at Port Coquitlam, British Columbia



A Good Example of Structural Steel Building

The new plant of the Canada Bread Company, Limited, erected during 1921 on Danforth Avenue, Toronto

Canadian Blotting Paper

Howard Smith Paper Mills, Limited, are Pioneers with New Canadian Product

After extensive and thorough experimentation blotting paper of the finest quality is now for the first time being produced in Canada, the Howard Smith Paper Mills, Limited, of Beauharnois and Crabtree Mills, Quebec, and Cornwall, Ont., being the pioneers of this branch of the industry.

Hitherto all the blotting paper used in Canada has been imported, the imports being valued at about half a million dollars a year. The success achieved in producing blotting paper in Canada leads to the belief that not only will this country now be self-supporting but will soon be in contest in the world's markets for this, as for many other grades of paper.

Erect Plant in Ottawa

Hamilton Tar Products Company, Limited, to Start New Branch in March

The Hamilton Tar Products Company, Limited, successors to the Hamilton Tar and Ammonia Company, Limited, have experienced a gratifying extension of business which necessitates the enlargement of their manufacturing facilities. For a number of years they have operated a factory in Hamilton in which they manufacture pitch, tarred roofing felts, building paper, plain and tarred, cresote oil, naphthalene, metal paints, fly oils and disinfectants. Their business in these products in Montreal, Quebec and the Maritime Provinces has developed to such an extent that it was necessary to increase their present plant or build a new one.

Keen competition and high freight rates have brought about the adoption of the latter alternative and accordingly they have purchased several acres of land in Ottawa on the estern part of Lees Avenue. On this property they are now erecting a modern coal tar still for producing pitch, creosote oil, naphthalene and other by-products of the distillation of tar. In conjunction with this tar still are a number of large steel storage tanks for holding the crude tar and their finished product.

Besides the tar still the company are putting up a mill to manufacture tarred felts and building papers. This building will be of brick construction, 80x160 feet. The plant is located on the G. T. R. and a siding has been extended into the property.

It is hoped to have a portion of the new factory in operation by the middle of March and the balance about six weeks later. At present about forty men are engaged in laying foundations, sewers, water mains, etc.

Though present business conditions are not generally too bright the company feel that now is the time to get ready for the good times which are bound to come before long.

Making Good Progress

Temiskaming Pulp & Paper Company, Limited, to be in Operation this Spring

The Temiskaming Pulp & Paper Co., of which Alex. Fasken, K.C., Toronto, is president, and J. H. Black, Toronto, manager, are making good progress in the erection of their groundwood pulp mill at Dixon Creek, near Haileybury, Ont. This building is 270 feet long by 60 feet wide, the superstructure being of concrete and steel, with interlocking tile brick wall and gypsum slate roof, covered with Barrett roofing specifications. The output of the plant will be 40 tons a day, and it is expected that the plant will be in operation early in the spring. Part of the equipment has been ordered, and it is understood that magazine grinders will be installed. The mill will be one of the most up-to-date in Canada and is assured of a pulpwood supply for many years to come.

The erection of the proposed plant of Anglo American Motors, Limited, at Trenton, Ontario, has not yet been commenced. The company state that they have plans for their factory, but at the present time it has not been definitely decided whether or not these will be carried out.

Manufacturing Space To Let

We have about 100,000 feet of manufacturing floor space to dispose of on lease

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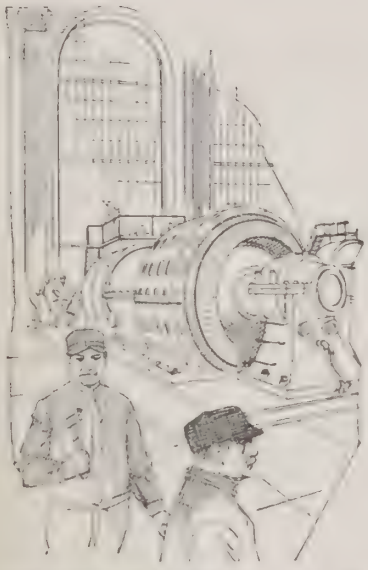
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APPLY

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The Clay and Clay Products Industry of Canada

(Agricultural and Industrial Progress in Canada)

A young Canadian industry which is making successful headway and promises to fill an important place among Canadian manufactures is that of clay and clay products which at the same time, from Canada's wide and valuable deposits of the necessary raw material, offers the opportunity for expansive development and the investment of capital. Not only is the home industry beginning to meet domestic requirements more adequately, but from the excellent standard set by her products is penetrating with much success into the foreign export field.

The total value of the clay and clay products industry in Canada for the year 1920 was $10,523,271, as compared with $7,906,366 in 1919, or an increase of roughly 33 per cent. The 1919 production in turn showed an increase of 67 per cent. over the 1918 figures, which is illustrative of how this young industry is growing. In the production of last year, common brick accounts for $4,868,958 of the total revenue; pressed brick $1,756,760; fire proofing $591,216; hollow building blocks $284,163; kaolin $15,022; terracotta $120,875; pottery $207,410; sewerpipe $1,549,090; drain tile $619,442; and other products $517,335.

Valuable Commercial Deposits

Canada is fortunate in the possession of valuable commercial clays, deposits being found all over her wide area. These consist of fire clay, brick and tile clays, and earthenware clays. Fire clay occurs at Shubenacadie and Middle Musquodoboit in Nova Scotia and several localities in Southern Saskatchewan as well as at Clayburn, B.C. It is also known to occur on the Mattagami and Missanabie rivers in Northern Ontario and on the Athabasca river below Fort McMurray. Semi-refractory clays occur in the coal measures at Westville, Nova Scotia, at Flower Cove and Minto, New Brunswick, and at several points in Southern Saskatchewan. Brick and tile clays occur throughout Canada, Ontario being the largest producer with over fifty per cent. of the total Canadian output. Earthenware clays occur in Southern Saskatchewan and Nova Scotia.

Import and Export

Canada's imports of clay in 1920 totalled $672,782 in value, china clay accounting for $242,441; fire clay $276,139; pipe clay $2,442; and other clays $151,760. Her total imports of clay products amounted in value to $10,781,592, of this amount $5,067,492 being purchased from the United Kingdom; $4,805,451 from the United States; and from all other countries $908,649.

In her export trade Canada sent away to other countries clay and clay products to the extent of $323,989, of which total $4,678 went to the United Kingdom; $240,128 to the United States; and $79,183 to other countries. Comprised in this export trade were $99,134 worth of building brick; $2,516 worth of clays unmanufactured; manufactured clays to the extent of $157,089; and earthenware and all manufactures of amounting to $65,250. Exports of foreign produce in clay and clay products amounted to $32,707.

The Manufacturing Centres

The centres about which the clay manufacturing industry revolves in Canada are St. John, New Brunswick, St. Johns, Quebec, and Medicine Hat, Alberta. These three points are responsible for practically the entire Canadian output of clay products. The prairie province industry, which draws its raw material from deposits just over the border in Saskatchewan, is an aggressive concern which has forged ahead until, according to the claims of its management it accounts for seventy-five per cent. of the Dominion output. Supplying the western provinces it has also successfully penetrated the east and finds a market in Ontario points, giving a good account of itself in competition with the imported article. Its products have also found a market in the United States.

The increase in Canadian clay products production exhibits the movement to meet domestic needs in this regard, but the still enormous importations of these same products point out clearly the wide field still left for expansion in this industry, which has all the aid required in the Dominion's wealth of various clays.

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The efficiency of modern machinery depends upon the efficiency of the man who operates it. If he is worried about the safety of his personal belongings and lacks the necessary small comforts, he is not truly efficient.

Many firms have solved this problem by installing Meadows' Steel Lockers. The employees are impressed with the order, neatness and efficiency of the institution, before they begin their days work. Each one has his private locker and the contents are safe behind the locked steel door. They feel that they have a share in the institution and take greater interest in their work.

If you are interested, our representative will call and offer some helpful suggestions for increasing the efficiency of your employees and increasing your production.

GEO. B. MEADOWS LIMITED

479 Wellington Street West, Toronto, Canada

Kingston Factories, Limited

New Kingston Industry now Manufacturing Shirts, Overalls, Dresses, etc.

A new industry for Kingston, Ontario, is the Kingston Factories, Limited, who started operations in January, manufacturing shirts, overalls, pants, bloomers, house dresses, pajamas, etc. The company have taken over two flats of the old Crawford broom factory building where they have about 10,000 square feet of floor space. They have installed 110 power machines and will employ from 50 to 75 operators.

The company have been fortunate in securing several large orders which will keep them busy for some time. The directors are Bernard Sky, J. O. Lawrence, A. Laidley, J. Sowards and Oliver Wilson.

New Montreal Plant

Colgate & Company Purchase Factory Building to Increase Canadian Production

Colgate & Company, soap manufacturers, of New York and Jersey City have purchased a modern two-storey brick building at 72-74 St. Ambrose St., Montreal, where they will be able to increase their Canadian production and speed up deliveries. The plant consists of a light, airy main building with large wings.

The Colgate business is one of the oldest industrial firms in the United States. It was established 115 years ago and there are now 3,000 employees in the main plant and agencies all over the world. The present heads of the company are the four grandsons and one great-grandson of the founder.

To Make Ranges

Beeby Range Company, Limited, Establishing Plant in Brockville, Ontario

The Beeby Range Company, Limited, recently incorporated with an authorized capital of $500,000, are establishing a plant at Brockville, Ontario, where they will manufacture the Beeby Burner and the Beeby Unity Range. They are renting 6,600 square feet of floor space from Machinery and Foundries, Limited, and expect to be turning out their products within the next two months.

The Unity range, which is the invention of John H. Beeby, founder of the company, combines in its design many novel labour-saving features. It is a combination coal and gas range and will burn soft or hard coal, wood or coke.

Directors of the Beeby Range Co. are A. Dion, A. J. Major, J. H. Beeby and C. A. Seguin, all of Ottawa; J. E. Gravelle Hull and two directors to be elected from Belleville.

Make New Product

John Bull Manufacturing Company get Canadian Rights for New Cleaner

The John Bull Manufacturing Company of Hamilton, Ontario, have made arrangements with the Climax Cleaner Manufacturing Company of Cleveland, U. S. A., to manufacture their product in Canada. The latter company have been exporting a considerable portion of their output to Canada and two other United States firms have been sending in wall paper cleaner which hitherto has not been made in this country.

The John Bull Manufacturing Company experimented on a formula for several months but as they could not get it exactly right they made arrangements with the Climax Company for their Canadian rights. They anticipate receiving at least $15,000 worth of business in this connection in 1922, and are now adding the necessary equipment for making the wall paper cleaner.

Resigns from Presidency

Lieutenant Governor Harry Cockshutt Succeeded by George Wedlake in Cockshutt Plow Company

His Honour, Lieutenant-Governor Harry Cockshutt, has resigned from the presidency of the Cockshutt Plow Company, Limited, Brantford, Ontario, as his new office requires his residence in Toronto. He is succeeded by George Wedlake, vice-president and general manager of the company, who will also retain the latter position. The Lieutenant-Governor will continue his connection with the company as chairman of the board of directors.



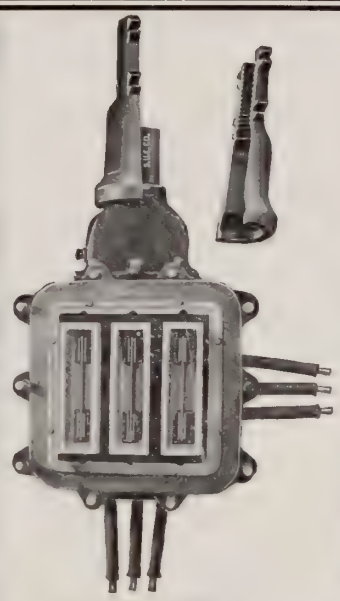
Mill to Rent

23 miles outside Montreal at Terrebonne, P. Q. on the C. P. R. lines. Water and electric power. Solid stone building 46 by 36 feet: two stories, hot water heating, modern plumbing, electric lighting. Also in connection therewith warehouse and office building 42 by 49 feet; and another three storey structure 43 by 32 feet.

APPLY

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Type E-106, 2,500-Volt Cable Junction Box

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insure economy in the installation and maintenance of electric cable systems, permit rapid disconnection of branch circuits and give absolute protection to the cable against moisture.

The box illustrated is a three-way sectionalizing box largely used in mines and designed for mounting on the wall of the mine shaft. The main line is connected solid through the box and the branch cable has the disconnecting feature.

The clamps which protect the lead nipple and enclose the armor wires of the cable and hold them in place are also shown in the illustration.

For detailed information write our nearest office

Standard Underground Cable Co. of Canada, Limited

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Pig Iron and Ferro-Alloys

Lowest Level of Production for Past Year Reached During December

The production of pig iron in Canada during December declined to the lowest level for the year, the total pig iron made amounting to only 39,917 long tons, all of which was made in blast furnaces. By kinds of iron produced the outputs for December were as follows: basic, 30,698 tons, foundry, 2,948 tons; and malleable 6,271 tons. Practically all the basic iron was made by the operators for their own further use, only 516 tons being made for direct sale. Foundry iron while showing a considerable decrease from the amount produced in November was for the most part made for direct sale. a total of 2,882 tons having been credited to this item during the month. For the first month since August a production of maleable iron was recorded and a total of 6,271 tons was produced for sale.

Ferro-alloys declined from 1,683 tons in November to 846 tons in December, the entire output consisting of the several grades of ferro-silicon.

Two furnaces of the Algoma Steel Corporation which were in blast at the beginning of the month were closed down before the end of the month. The Dominion Steel Corporation also which had two furnaces in blast on December 1st, finished up the year with only one furnace working. There were therefore only two furnaces active on December 31st, one operated by the Steel Company of Canada at Hamilton and one by the Dominion Steel Corporation at Sydney. Throughout the greater part of the year at least five furnaces were active, December being the only month in which fewer than five were in blast.

The average monthly output of pig iron in Canada during the twelve months ending December was 50,000 tons, or less than the average monthly record of any year since 1908. Throughout the entire period during which a total of 595,000 long tons of pig iron was made, the market was decidedly quiet and the suspension of interest in iron was general. In the United States as in Canada the final week of 1921 was characterized by a quiet market and declining production. In spite of this there was evidence at the close of the year that there would be an early resumption of activities in the iron trade and the opinion was generally expressed that the first month of the new year would see the beginning of an upward movement in production.

Steel Ingots and Castings

Heavy Decline in Output and Price Shown for Month of December

The decline in the output of the pig iron during December, and the generally dull market for steel resulted in a marked falling off in the production of steel ingots and castings, the decline from November amounting to more than 30,000 tons. The outputs for the months of November and December were respectively 75,039 tons and 42,653 tons. Of the December output 41,000 tons consisted of basic open hearth steel ingots made by the producers for their own further use in manufacturing. A total of 1,551 tons of direct steel castings was made, of which 1,458 tons was produced for direct sale, comprising 657 tons of basic open hearth castings, 97 tons bessemer castings, and 704 tons of steel castings made from electric furnaces. During the month 93 tons of direct steel castings was made by the firms reporting for use in manufacturing in their own plants.

During the twelve months ending December 667,484 long tons of steel ingots and castings was produced as compared with 1,109,000 tons made during 1920. The average monthly production during the preceding year. Of the total production of steel ingots and castings during 1921, 645,075 tons was in the form of direct steel ingots comprising 641,882 tons of basic open hearth steel, 239 tons acid open hearth steel, 94 tons bessemer, and 2,860 tons made in electric furnaces. The whole basic and acid open hearth production of steel ingots was made by the operators for the use



BRASS, BRONZE
AND
ALUMINUM CASTINGS
BY

MODERN MOULDING METHODS **CUT CASTING COSTS**

Our Method—Your Cost

Quantity production work a specialty.

Jobbing work taken care of promptly.

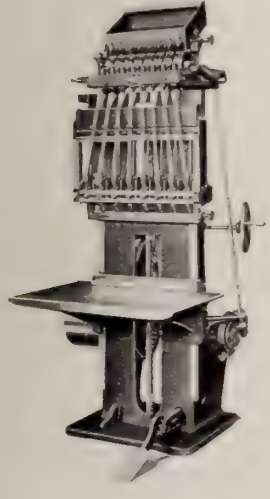
Send us your patterns for trial order.

All castings **Sand Blast Finish.**

We stock Bronze Bushing Materials, all sizes—Cored and Solid. List sent on request.

SULLY BRASS FOUNDRY Ltd.
Brock Ave. and Bloor St. W.
TORONTO

YATES
NAILING MACHINES
Built Strong for heavy continuous Service



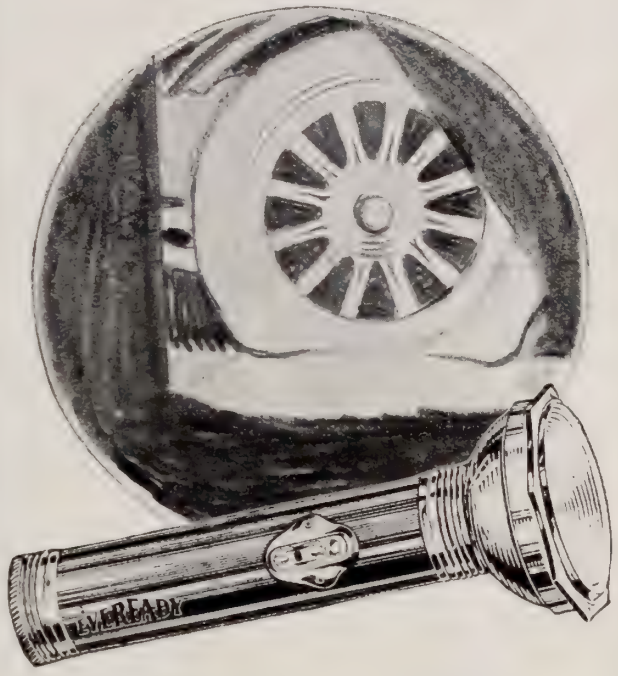
OPEN AND CLOSED BACK TYPES

Yates

BUILT IN DIFFERENT SIZES

P. B. Yates Machine Co. Ltd.
Hamilton, Canada

EVEREADY FLASHLIGHTS Meet Every Need for Emergency Light



The Ghosts of the Night Trail!

THE Empty gasoline-tank; the flat tire; the asthmatic carbureter that chokes, and stalls your motor; the faltering spark plug that demands attention; the boiling water-jacket that thirsts for another drink—these are the ghosts of the night trail.

Every motorist encounters these terrors of the trail sooner or later. What a comforting thought it is to know that in the side-pocket of the car is your trusty Eveready Flashlight!

As necessary a part of the motorist's equipment as the tire-jack, the socket-wrench and—yes—the spare tire. Not only for the break-down but for reading road-signs, gasoline-gauges, etc.

Don't drive at night without an Eveready Flashlight. See the nearest electrical, hardware, drug, sporting goods or auto-supply store and select the type you like most. The Eveready trade-mark is your assurance of quality. Always use Eveready Batteries—they fit *all flashlights.*

CANADIAN NATIONAL CARBON COMPANY, LIMITED

Montreal Toronto Winnipeg Vancouver

EVEREADY
FLASHLIGHT
The light that says "There it is!"

of their own mills. Of the bessemer ingots produced 37 tons was used directly and the balance was produced for sale. A total of 2,200 tons of electric steel ingots was used by the plants reporting and 600 tons was made for sale.

Steel castings produced during the year amounted to 22,409 tons, comprising 6,531 tons basic open hearth, 256 tons acid open hearth, 1,638 tons bessemer and 13,984 tons castings made from electric furnaces. Of the whole amount 18,495 tons was made for sale and 3,914 tons used by the firms reporting. An analysis of the 18,495 tons of direct steel castings made for sale shows 5,081 tons was made by the basic open hearth process, 252 tons in acid open hearth furnaces, 1,401 tons by the bessemer process and 11,761 tons from electric furnaces.

The low price of steel in December was not only the low for the year but was lower than at any time since January, 1916. While the production of steel during 1921 was less than for any preceding year since 1908 the sentiment prevailing in the steel trade at the end of December was favorable to an early resumption of activity and the hope was everywhere expressed that the early months of the new year would be marked by a resumption of construction work as a result of the more favorable purchasing market established and that as a consequence a considerable development in the production of steel might be expected.

Trade Returns

Exports and Imports show further Decline during Month of December

For the month of December Canadian trade showed another decline, imports being lower by about 26 millions, and exports by about 63 millions. In the imports the greater part of the decline is accounted for by metals, minerals and manufactures thereof. With the exports declines are shown by the articles and also by foodstuffs which have dropped about 36 millions. Exports of wood, wood products, paper, etc., are also much lower than in December, 1920. Following are the December figures:

IMPORTS ENTERED FOR HOME CONSUMPTION

	Month of December 1920		1921	
	Free	Dutiable	Free	Dutiable
Agricultural and vegetable products, mainly foods	$ 2,702,268	$ 7,293,672	$ 2,441,334	$ 6,153,626
Agricultural and vegetable products, other than foods	2,437,167	4,171,492	1,538,022	4,040,400
Animals and animal products	1,418,232	2,267,726	1,257,743	2,101,331
Fibres, textiles and textile products	4,483,049	7,350,130	4,429,925	6,946,836
Chemicals and chemical products	922,327	1,174,694	862,998	1,267,415
Iron and steel, and manufactures thereof	3,124,544	15,419,206	563,558	6,508,411
Ores, metals and metal manufactures, other than iron and steel	1,029,550	3,098,324	658,823	1,811,570
Non-metallic minerals, and products	7,131,559	11,750,410	6,357,140	5,124,943
Wood, wood products, paper and manufactures	1,719,910	3,311,618	1,071,126	1,977,565
Miscellaneous	2,530,151	2,546,124	2,703,423	2,232,977
Total	27,498,757	58,383,396	21,884,092	38,165,074
Duty collected		11,521,195		9,911,908

EXPORTS

	Month of December 1920		1921	
	Domestic	Foreign	Domestic	Foreign
Agricultural and vegetable products, mainly foods	$84,482,276	$ 61,638	$48,483,217	$ 64,612
Agricultural and vegetable products, other than foods	2,558,389	29,828	1,159,049	53,261
Animals and animal products	18,734,584	56,957	12,124,063	77,179
Fibres, textiles and textile products	1,785,044	267,378	348,803	33,243
Chemicals and chemical products	1,222,111	110,183	853,053	43,579
Iron and steel, and manufactures thereof	8,627,564	464,617	2,390,506	226,488
Ores, metals and metal manufactures, other than iron and steel	3,800,983	71,259	2,252,696	127,595
Non-metallic minerals, and products	3,319,328	133,537	1,758,980	87,484
Wood, wood products, paper and manufactures	23,270,641	113,168	15,903,042	19,998
Miscellaneous	1,483,405	357,091	1,030,754	148,112
Total	149,284,325	1,665,656	86,304,163	881,551

Are Your Employees Pulling With You or at Cross Purposes

MOST discontent is developed out of working hours when the men are not cheerfully employed.

Welfare Clubs are springing up all over the country to counteract unrest, labor turn-over and non-productivity among workmen, and they are succeeding.

A warm, well-lighted room, with a billiard table or so, has been effective in developing a much improved spirit among the men of many an industrial concern.

We are in a position to supply plans and direction for anything from a single table up to the most elaborate welfare institution. **Consult our experts.**

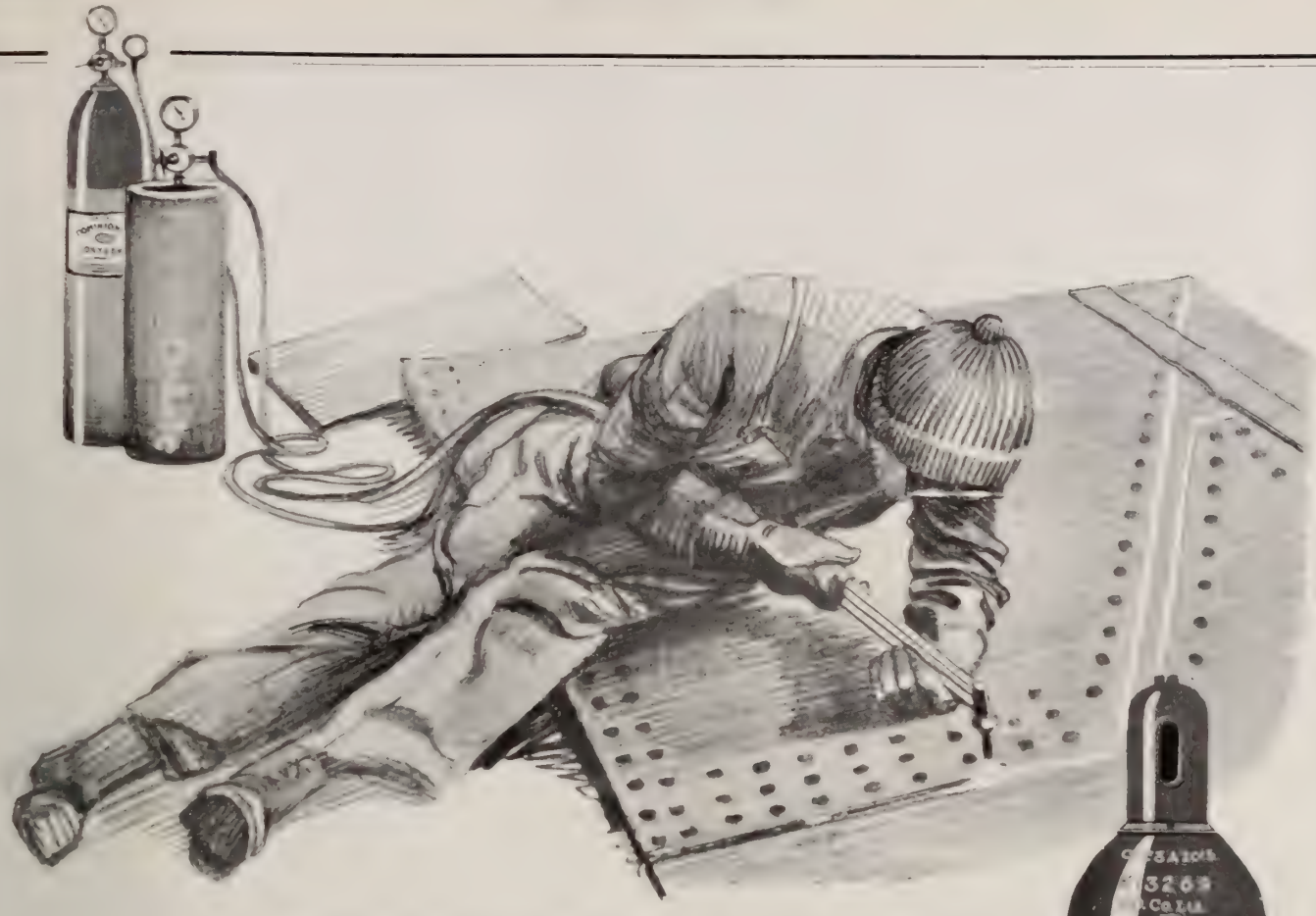


A corner of the Canadian Link-Belt Company's Club very much appreciated by the employees

The Brunswick-Balke-Collender Co. of Canada, Limited

Manufacturers of Billiard Tables and Bowling Alley Equipment

TORONTO MONTREAL WINNIPEG VANCOUVER EDMONTON



Cutting Steel Plates to pattern with an Oxweld Cutting Blowpipe

Valves on Dominion Oxygen tanks do not leak!

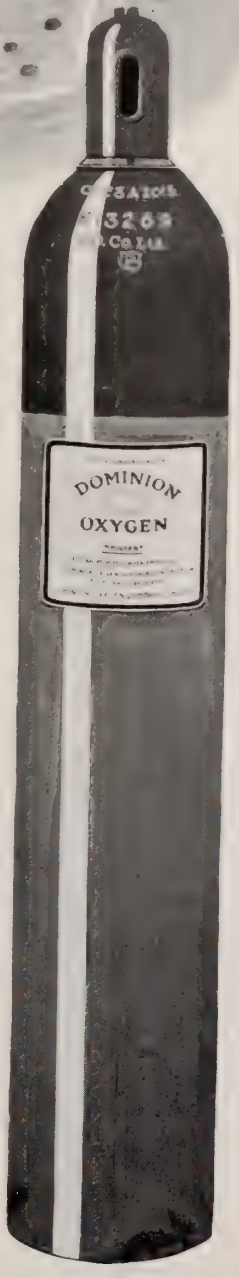
WHEN you order a tank of Dominion Oxygen, you get a tank filled to capacity—just the way it left the plant. There are no leaking valves dissipating oxygen into the air instead of conserving it for efficient welding and cutting at the blowpipe's tip.

The wedge valve on a Dominion Oxygen Tank has been perfected in design and construction after years of careful study. It is your assurance of a full tank and no waste. Forged from bar stock, it resists the wear of internal friction and reseats itself while the tank is fully charged and in use—truly a money-saving feature.

This non-leaking valve is only one of the many evidences of the good service rendered by Dominion Oxygen to its customers.

To secure uniformly pure oxygen in lightweight cylinders with efficient valves, shipped to you the same day that your order is received, order a sample cylinder today from our nearest Distributing Station.

Our price is right — be sure to let us quote you before ordering your supply.



Dominion Oxygen Co., Limited

Hillcrest Park, Toronto

Hamilton Merritton Montreal Welland Windsor

Time to Think Fence Protection!

Do You Realize

That Frost Non-climbable Property Protection fence would protect your property night and day for years ?

That it would pay for itself by saving your material ?

That it would centralize your workmen's entrance and exit ?

That it would keep out Thieves, Agitators, Organizers, Tramps, Peddlers, the cunning crank and the careless gang ?

That it will give you safety, pride and pleasure in ownership and pre-eminence ?



PLANT OF DOMINION GLASS CO., LIMITED, HAMILTON

PHONE, WIRE OR WRITE

FROST STEEL AND WIRE CO., LIMITED

HAMILTON :: ONTARIO

December Building Conditions

Great Construction Activity during the Month Makes Second Largest Total on Record

Construction activity in Canada, according to figures compiled by MacLean Building Reports, Limited, during the month of December, amounted to $19,118,500. This is the second largest December total on record, being exceeded only once, and that in December, 1912, when $31,125,528 was expended. The figures for the different provinces are as follows:

	No. Products.	Value.
Ontario	732	$8,959,900
British Columbia	147	5,197,000
Quebec	187	2,995,900
New Brunswick	13	1,147,500
Manitoba	17	342,600
Nova Scotia	36	198,600
Alberta	13	139,500
Saskatchewan	15	137,500
Total for Dominion	1,160	$19,118,500

Work reported during December for the first time as contemplated totalled $13,997,800. The figures for the Dominion are as follows:

	No. Projects.	Value.
Ontario	251	$8,590,700
Quebec	265	2,627,000
Western Provinces	51	2,124,100
Maritime Provinces	16	656,000
Total for Dominion	583	$13,997,800

The value of construction contracts awarded throughout Canada during 1921 was $240,133,300, compared with $255,605,500 in 1920; $190,028,300 in 1919, and $99,842,100 in 1918. However, if price recessions in material and labor costs are taken into consideration, the volume of new construction undertaken during 1921 was many millions of dollars greater than the 1920 total.

November Bank Statement

Increase in Assets and Liabilities over October but Decrease from November, 1920

The bank statement of November, 1921, shows an increase in the assets and liabilities of Canadian banks over the previous month, but a decrease from the totals for the corresponding month of 1920. Liabilities of Canadian banks for November total $2,541,336,278.00, as compared with $2,519,098,671.00 for October and $2,835,578,788.00 for November, 1920. Assets for November, 1921, total $2,824,130,507.00, as against $2,806,827,597.00 for October and $3,116,896,351.00 for November, 1920. The statement follows:

	Nov., 1921	Nov., 1920
Reserve fund	$ 135,223,499	$ 132,782,190
Note circulation	181,953,001	234,339,923
Demand deposits	555,901,712	686,754,094
Notice deposits	1,252,227,394	1,292,009,008
Deposits outside of Canada	285,217,706	352,780,924
Current coin	81,671,381	86,721,023
Dominion notes	198,821,730	190,640,878
Deposit C. G. R.	69,402,533	114,902,533
Call loans, Canada	104,392,115	108,471,340
Call loans outside Canada	193,001,119	218,183,194
Current loans, Canada	1,210,101,634	1,337,973,118
Current loans outside Canada	144,340,080	169,677,689
Total liabilities	2,541,336,278	2,835,578,788
Total assets	2,824,130,507	3,116,896,351

December Wholesale Prices

Canadian Bank of Commerce Index Number Registers Slight Decline

The index number of wholesale prices for exports as calculated by the Canadian Bank of Commerce fell during the month of December from 144.05 to 143.43. This is accounted for by the decline in the prices of butter, potatoes, silver and bituminous coal, balancing the marked improvement in the position of beef, cattle and hogs. Wheat and barley have rallied from the low point of early December. The index number for imports, which rose in November to 150.34, fell during December to the October level and stands at 148.10. In this class corn and rubber have risen, but sugar, anthracite coal and coke show substantial declines. The combined number for exports and imports continued to fall at the same rate as before, and was 145.76 in the middle of December as against 147.19 in November.

THE UNION BANK OF CANADA

Has an Exceptionally Strong Statement

Bank's Position is Well Maintained, the Liquid Assets being 53.70 per cent of Total Liabilities to the Public—Resources aggregate $152,625,386

THE balance sheet of the Union Bank of Canada, for fiscal year ended November 30th, 1921, which was returned to the shareholders at the 57th Annual Meeting held at the Bank's head office in the city of Winnipeg, on Monday, January 9th, discloses this well-known banking institution to be in a very strong and liquid position.

The Bank's assets total $152,625,386. The readily available portion of these assets represents 53.70 per cent. of the Bank's total liabilities to the public, thus demonstrating that the liquid position of the Bank has been strongly maintained.

A very strong feature of the statement is the carrying forward of $541,686 into next year's profit account, this being $400,000 greater than the previous year, and the largest amount in the Bank's history.

That the Bank has continued to do its full share for the commercial interests of Canada is shown by the fact that the total of these loans at the end of the year was $62,010,007.

Grain loans total $7,295,483. Loans to Governments and Municipalities are $7,420,529.

Deposits totalling $116,723,755 are reported.

Net profits for the year amounted to $1,342,389 which is about $300,000 less than the previous year.

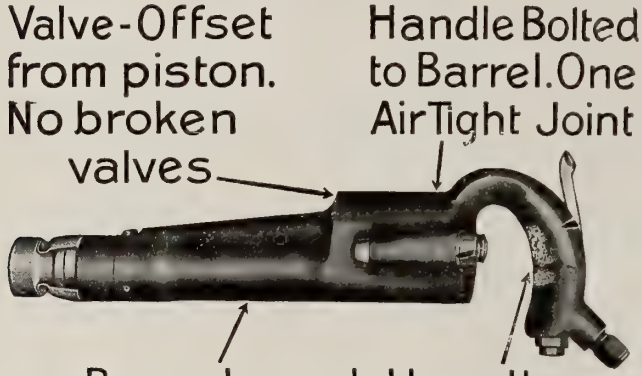
Complimentary copy of our Year Book, giving Statistics of the progress of Canada may be obtained from any of our branch managers.

UNION BANK OF CANADA

15.6 Cents
Per Tool Per Month

The Average Maintenance Cost on

1300
"Little David" Riveters



One of the largest users of pneumatic riveters in the world having 1300 "LITTLE DAVID" riveters and a large quantity of similar tools of various makes kept an accurate record of their maintenance cost for a period of several months. They found that the "LITTLE DAVID" was by far the most economical and that the total upkeep of the 1300 for one month was $203.00 or 15.6 cents per tool.

Here are a few of the reasons why such records are possible:

The Handle and Barrel are securely held together by two alloy steel bolts eliminating the threaded joint type of construction common to most tools of this class. Threaded joints soon work loose and leak, or corrode so that the tool cannot be taken apart for cleaning and inspection. "LITTLE DAVID" joints are tight and easily kept so with an ordinary wrench.

The Offset Valve placed alongside the barrel of the tool cannot be broken by a free running piston which sometimes happens where the valve is placed in the handle above the cylinder bore.

The Handles can be furnished with either Inside or Outside Trigger Control and of Open, Closed or inverted type to suit the operator. The Open or Inverted type handles are particularly suited for use out doors as the operator has plenty of room for his gloved hand.

The whole tool is sand blasted making it easy for the operator to hold when his hands are greasy or wearing gloves.

Many other good features of "LITTLE DAVID" riveters are described in bulletin 8611 which will be sent on request.

Canadian Ingersoll-Rand Company
Limited

Sydney Sherbrooke Montreal Toronto
Cobalt Winnipeg Nelson Vancouver

Ingersoll-Rand

Industrial Disputes

Time Loss Lower in October and no new Strikes Reported During the Month.

The time loss due to industrial disputes during October, as reported by the *Labour Gazette*, was less than during either September,1921, or October, 1920. No new strikes were reported during the month. Sixteen strikes were carried over from the previous month involving about 2,229 work people and resulting in a time loss of about 54,704 working days. None of these strikes was reported as having terminated during the month.

Cigar Factory Burned

Expensive Fire at the Plant of William Ward & Sons, London, Ontario.

Damage estimated at $200,000 was caused by a fire in the cigar factory of William Ward & Sons, London, Ontario, on December 19th. The rear part of the plant, which is a four-storey brick structure, was completely gutted. This part, which was built about five years ago, comprises about half the premises.

The origin of the fire is as yet undetermined, but it is believed to have originated in the basement, near the boiler room at the rear of the building. The fire had a good start when first observed, but was brought under control in about an hour.

A heavy stock of raw material and several thousand dollars' worth of manufactured goods were stored in the burned part and these are a total loss. Smoke and vapour also ruined much of the stock stored in the other part of the building. The machinery, which was new five years ago, is also ruined. Of the total loss about $125,000 is covered by insurance.

Welfare Work Appreciated

E. C. Boeckh Receives Illuminated Address from Employees of his Company

That welfare work is appreciated by employees was shown recently at the factory of the Boeckh Company, Limited, when E. C. Boeckh, president of the company, was presented with an illuminated address by his workmen in recognition of the interest he has always shown in their welfare. A recent development in this line was the distribution of disability and life insurance policies.

Mr. Boeckh, in replying to the address, referred to the friendly relations which existed between executives and staff in all departments and expressed the hope that this condition would continue, as he felt that the spirit of good will and cooperation made for the best interests of all.

Shoe Plant Burned

Loss of $75,000 Caused to Plant of Hector Shoe, Registered, Montreal

Fire caused by an overheated furnace pipe seriously damaged the plant of Hector Shoe, Registered, 311 Demontigny Street, Montreal, on December 8th. The blaze was a most spectacular one and lasted two hours before being brought under control. F. H. Leblanc, president of the company, sets the loss at $75,000, and about 175 hands will be out of employment as a result.

John Hepner

Death of one of the Founders of Stevens-Hepner, Limited, Port Elgin

On January 13th the death occurred of John Hepner of the firm of Stevens-Hepner, Limited, Port Elgin, Ontario. Mr. Hepner was born in Napanee 73 years ago and went to Port Elgin as a young man where he entered the old Port Elgin Brush Works, then owned by the late Col. B. B. Boyd. With H. H. Stevens he secured control of this firm, and under their guidance it was built into one of the largest brush and broom industries in Canada.

Mr. Hepner was concerned mostly with the practical end of the business, and during his long connection with the firm was held in high regard by his employees. He was obliged through ill health to cease active work about three years ago and since then he had travelled considerably. His death will be keenly felt by the citizens of Port Elgin and manufacturers of Western Ontario.

Files Hand Stokers Getting Results

PANTHER RUBBER COMPANY, LIMITED

GENERAL OFFICES AND FACTORIES
SHERBROOKE, QUE.

SHERBROOKE, CANADA September 23, 1921.

The Waterous Engine Works Co. Ltd.,
Brantford, Ont.

Gentlemen:

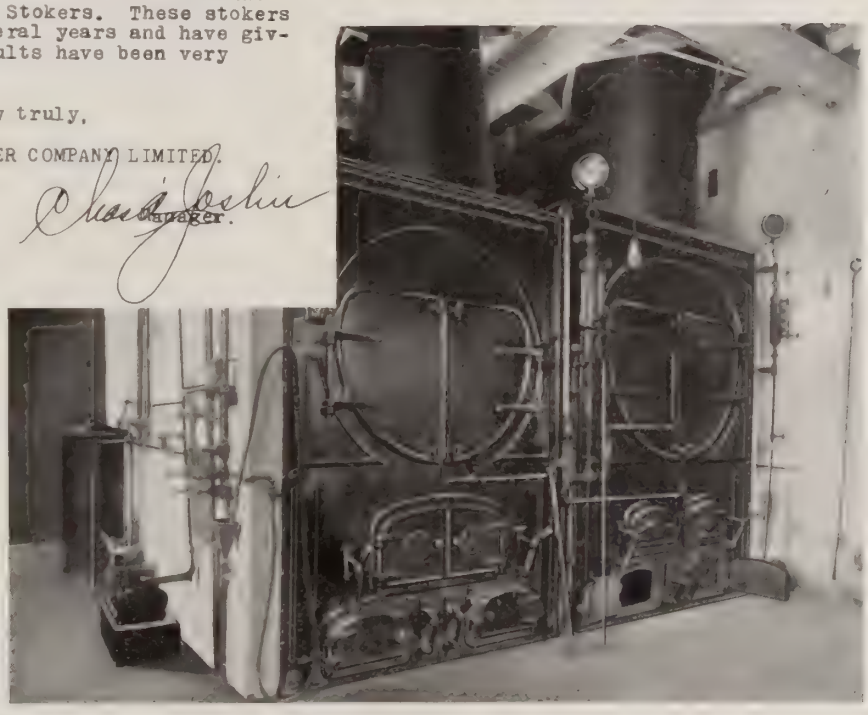
In reply to your letter of the 8th instant we have in our plant the Files Stokers. These stokers have been in operation for several years and have given excellent service. The results have been very satisfactory.

Yours very truly,

PANTHER RUBBER COMPANY LIMITED.

Manager.

CAJ/RMK



It is the uniform excellent service and general satisfaction that have caused progressive men to select **Files Stokers.** These are typical of the more complete data we have compiled:

One installation (3600 H.P.) saved enough coal to pay for their stoker investment in five months.

A Files installation operated for five months continuously at an average rating of 223%—doubling their steam output.

Files stokers increased efficiency of one plant sufficiently high to warrant discontinuance of two out of eight boilers.

Here is a ready explanation of these achievements:—

1. **Complete volatilization of green coal, causing intensified combustion and smoke demination.**
2. **Correct distribution and proper proportion of air according to load carried.**
3. **Fuel bed continuously kept clean, uniform and rich.**

Given the opportunity we will be glad to present these facts for your complete satisfaction.

The Waterous Engine Works Company, Ltd.

Brantford, Ontario

THE DOMINION BANK

At the Fifty-first Annual General Meeting of the Shareholders of The Dominion Bank, held at the Head Office in Toronto, on 25th January, 1922, the following statement of the affairs of the Bank as on the 31st December, 1921, was submitted:

General Statement

LIABILITIES

Capital Stock paid in		$6,000,000 00
Reserve Fund	$7,000,000 00	
Balance of Profit and Loss Account carried forward	715,480 59	
Dividend No. 157, payable 3rd January, 1922	180,000 00	
Bonus, one per cent., payable 3rd January, 1922	60,000 00	
Former Dividends unclaimed	255 00	
		7,955,735 59
Total Liabilities to the Shareholders		$13,955,735 59
Notes in Circulation	7,326,571 00	
Due to Dominion Government	8,552,610 00	
Deposits not bearing interest	$18,018,016 33	
Deposits bearing interest, including interest accrued to date	80,786,284 33	
	98,804,300 66	
Balances due to other Banks in Canada	869,285 18	
Balances due to Banks and Banking Correspondents elsewhere than in Canada	833,679 23	
Bills Payable	267,960 00	
Acceptances under Letters of Credit	354,740 43	
Liabilities not included in the foregoing	371,060 49	
Total Public Liabilities		117,389,206 99
		$131,335,942 58

ASSETS

Gold and Silver Coin	$2,117,000 19	
Dominion Government Notes	15,715,807 50	
Deposit with Central Gold Reserves	1,700,000 00	
Notes of other Banks	1,100,880 71	
Cheques on other Banks	7,389,393 59	
Balances due by other Banks in Canada	1,000 00	
Balances due by Banks and Banking Correspondents elsewhere than in Canada	2,397,668 15	
	30,421,750 14	
Dominion and Provincial Government Securities, not exceeding market value	13,371,201 90	
Canadian Municipal Securities, and British, Foreign and Colonial Public Securities other than Canadian, not exceeding market value	4,168,630 45	
Railway and other Bonds, Debentures and Stocks, not exceeding market value	1,751,108 28	
Call and Short (not exceeding thirty days) Loans in Canada on Bonds, Debentures and Stocks	6,561,853 52	

ASSETS—Continued

Call and Short (not exceeding thirty days) Loans elsewhere than in Canada	3,825,123 27	
		$60,109,667 56
Other Current Loans and Discounts in Canada (less rebate of interest)	63,710,574 03	
Other Current Loans and Discounts elsewhere than in Canada (less rebate of interest)	554,542 96	
Liabilities of Customers under Letters of Credit, as per contra	354,740 43	
Real Estate other than Bank Premises	5,430 37	
Overdue Debts (estimated loss provided for)	144,358 59	
Bank Premises, at not more than cost, less amounts written off	830,229 52	
Deposit with the Minister of Finance for the purposes of the Circulation Fund	309,575 00	
Mortgages on Real Estate sold	17,227 81	
Other Assets not included in the foregoing	209,596 31	
		71,226,275 02
		$131,335,942 58

E. B. OSLER, President.

C. A. BOGERT, General Manager.

AUDITORS' REPORT TO SHAREHOLDERS

We have compared the above Balance Sheet with the books and accounts at the Chief Office of The Dominion Bank, and the certified returns received from its Branches, and after checking the cash and verifying the securities at the Chief Office and certain of the principal Branches on December 31st, 1921, we certify that, in our opinion, such Balance Sheet exhibits a true and correct view of the state of the Bank's affairs, according to the best of our information, the explanations given to us and as shown by the books of the Bank.

In addition to the examinations mentioned, the cash and securities at the Chief Office and certain of the principal Branches were checked and verified by us at another time during the year and found to be in accord with the books of the Bank.

All information and explanations required have been given to us and all transactions of the Bank which have come under our notice have, in our opinion, been within the powers of the Bank.

G. T. CLARKSON
R. J. DILWORTH
(Of Clarkson, Gordon & Dilworth, C.A.)

Toronto, January 19th, 1922.

OFFICE AND FINANCE

The Business Situation through Bankers' Eyes

Opinions expressed by leading Canadian Bankers at recent annual meetings of Canadian banking institutions.

A FRANK discussion of the relation of banking to the commercial activities of Canada was a salient feature of the address delivered at the annual meeting of shareholders of The Canadian Bank of Commerce by Sir John Aird, the general manager. In commenting upon the changes in the figures in the bank's statement during the past year, particularly in those of current loans in Canada, Sir John pointed out that The Canadian Bank of Commerce still holds an outstanding position as regards this item, "which represents roughly the measure of service rendered to the commercial and industrial business of Canada and to its agricultural interests," and stated that, while setting its face against fostering unsound enterprise, this Bank would carefully avoid any discrimination against legitimate business. The decrease in the Bank's assets of between 10 and 11 per cent. as compared with the figures of a year ago was more than accounted for, he said, by the decrease in commodity prices, and an analysis of these assets would show that not only had the proportion of quick assets to liabilities increased from a year ago, but the commercial loans themselves had stood the test of ready liquidation to such an extent that the Bank's policy was amply justified. The decline in the volume of these loans, said Sir John, "was not caused by any set policy of contraction or enforced liquidation, but simply by the natural, orderly and voluntary payment of debts by our customers in the face of the depressed business situation." The method by which the board of directors and the Bank's auditors are given satisfactory evidence of the soundness of the Bank's loans, and the manner in which ample provision is made for overdue debts were also dealt with in some detail.

The Canadian Bank of Commerce Annual

The general manager reviewed the course of New York and sterling exchange during the past year, and attributed the marked improvement in sterling mainly to the decrease in the gross value of Great Britain's exports owing to the fall in prices, and to the repayment to the United States of part of her indebtedness. On the other hand the cumulative effect of large sales of bonds in the New York market by Canadian provinces and municipalities has for the time being lowered the premium in Canada on New York funds. He referred also to the retarding effect of heavy taxation upon the return of prosperity, but believed that the doubt as to the future of business in the country had cleared away, and as an evidence of the hopefulness that prevailed in his own institution, cited the opening of two southern branches during the past year, in Port of Spain, Trinidad, and in Rio de Janeiro, Brazil.

The fact that a nation can, in the long run, pay for its imports only by its exports, has a particular bearing upon the economic situation in the world today; and in that part of his annual address which deals with trade, Sir Edmund Walker, the president of the Bank, who followed the general manager, applied this truth to the case of Canada. He pointed out the serious loss in this country's buying power owing to a decrease of some $114,000,000 in the value of its agricultural products, and said that, so far as the United States market for our live stock was concerned, "if the Fordney tariff remains in force, our power to buy from the United States will be curtailed accordingly, and we must in self-protection put every obstacle in the way of our people buying from that country the commodities for which we are thus rendered unable to pay." He also noted the decision of the British Parliament to maintain the embargo on Canadian live cattle in spite of the evident wishes of the British consumer. A realization of her position is at last beginning to manifest itself in Canada's trade figures. The extravagance shown by the returns for the fiscal year ending March last, when imports exceeded exports by $29,730,000, has been giving way to greater economy, the figures for the twelve months ending September, 1920 and 1921, showing the great change that has taken place. While Canada's aggregate trade for the former period amounted to over $2,500,000,000, it was during the latter only $1,900,000,000, but this contraction was not equal on both sides of the account, for Canada actually converted a balance of $80,000,000 of excess imports into a favourable balance of $85,000,000.

Turning to the economic position of Europe, he pointed out that "the need which takes precedence of all others is that budgets must be made to balance," and expressed the belief that the Allied debts should not be entirely cancelled. The suggestion of the United States that she should be repaid in 25 years at 5 per cent. interest would mean, however, that Europe would have to produce so much more in the way of exportable commodities that "the result would be ruinous to the industries of the United States." In his concluding remarks Sir Edmund returned to the charge of unfairness which he brought last year against the incidence of the income tax in Canada; "far from laying the debt upon the shoulders of all, it endeavours to take as much as possible from all incomes exceeding $1,000 for unmarried persons and $2,000 for married people, leaving all under these amounts free from any direct tax", while those with incomes exceeding a certain amount, upon whom the great burden of development of the country rests," "are penalized as if they were sinners". He urged a tax of one per cent. on all sales to be applied exclusively to the war debt. For the future of the country he said every prospect was good, as soon as normal conditions returned.

* * *

Reviewing the past year at the annual meeting of the Union Bank of Canada, the president, John Galt, spoke of the cautious policy the directors had considered necessary while deflation was taking place. The period had been a trying one for all classes, the farmers having had to face a fall in the prices of their products and the manufacturers finding their market greatly reduced owing to diminished purchasing power and the uncertain outlook for trade.

Union Bank of Canada

"The live stock industry," said the president, "has been struck very hard during the last year. The emergency tariff in the United States has practically prohibited the export of animals, and, the British embargo being still in effect, no relief has been obtained from that source. In the opinion of many, well qualified to judge, the chilled meat trade offers a profitable channel for Canadian live stock growers, and a thorough investigation as to its possibilities is well worthy of the attention of the proper authorities. The outlook with regard to this important industry is not at the moment cheerful, and it is to be hoped that conditions may soon improve.

"In common with other productive industries, Canada's great staple activity, lumbering, has had its share of the business stagnation. Revival of home demand depends on an improvement in rural and industrial conditions. Some slight relief has been afforded by a demand for our lumber from trans-Pacific countries. It is reasonable to hope for an early improvement in the home demand and to expect that the foreign trade will become even more valuable to us than it is at present.

"The foreign trade of the Dominion shows considerable decrease as compared with previous years, both in quantity and in value. This condition is world-wide, and no immediate improvement seems to be in sight until the finances of Europe are rehabilitated. The favorable feature here is that our imports show a greater decrease

Bank of Montreal

Established over 100 Years

Capital Paid up - -	$22,000,000
Rest - - -	$22,000,000
Undivided Profits -	$1,501,646
Total Assets - -	$517,403,162

BOARD OF DIRECTORS:

Sir Vincent Meredith, Bart., President
Sir Charles Gordon, G.B.E., Vice-President

R. B. Angus, Esq.
Lord Shaughnessy, K.C.V.O.
C. R. Hosmer, Esq.
H. R. Drummond, Esq.
D. Forbes Angus, Esq.
Wm. McMaster, Esq.
Lt.-Col. Herbert Molson, C.M.G., M.C.
Harold Kennedy, Esq.
H. W. Beauclerk, Esq.
G. B. Fraser, Esq.
His Honour Henry Cockshutt, Esq.
J. H. Ashdown, Esq.
E. W. Beatty, Esq., K.C.
Sir Lomer Gouin, K.C.M.G.
Gen. Sir Arthur Currie, G.C.M.G., K.C.B.

Head Office: MONTREAL

Sir Frederick Williams-Taylor, General Manager

BRANCHES THROUGHOUT CANADA and NEWFOUNDLAND

FOREIGN BRANCHES AND AGENCIES

LONDON, England PARIS, Bank of Montreal (France)

MEXICO CITY

UNITED STATES: New York, Chicago, Spokane, San Francisco —British American Bank (Owned and controlled by the Bank of Montreal)

WEST INDIES, BRITISH GUIANA and WEST AFRICA—The Colonial Bank (in which an interest is owned by the Bank of Montreal)

Collections--Domestic or Foreign

OUR system of over 530 branches in Canada and abroad enables us to supply the manufacturer and merchant with information on trade risks impossible to secure from other sources.

Collections entrusted to us will be handled promptly and to your satisfaction.

The Canadian Bank of Commerce

Capital Paid up $15,000,000
Reserve Fund $15,000,000

than our exports, and the unfavorable balance against us for eleven months in 1921 is only $23,000,000 as against $128,000,000 in 1920.

"The financial conference now in session in France has immense possibilities and we earnestly hope that the result of its deliberations may be such as to bring about the stabilization of exchanges, with the consequent gradual resumption of world trade.

"A settlement of the difficulties in Ireland seems to be in view, and this undoubtedly will have a most beneficial effect, removing, as it will, a source of grave irritation between the various branches of the Anglo-Saxon peoples.

"The Washington Conference, too, has already accomplished much, and it is to be hoped that before its labors are completed many matters at present in dispute between the various participants will have been satisfactorily settled to the benefit of the world at large.

"The immediate future of business seems to be largely dependent on these three important questions, and the outcome of each one of them is awaited with deepest interest throughout the world.

"Anyone comparing the condition of Canada to-day with that of the United States in 1790, or again, with the period immediately following their Civil War, cannot but be struck by their quick transition under the influence of peace and an established government from a state of bankruptcy and disorganization to an era of progress and contentment. In material resources we are not far behind them. and with the energy and ability of our people should we not believe in a correspondingly rapid recovery in the great nation which we are building up in this Dominion?"

H. B. Shaw, general manager of the Union Bank, speaking of the deflation period said that it had come upon the country with suddenness and force. "However, there are some relieving features. One is that Canada's commercial and financial fabric has maintained itself against the threatening tide with wonderful steadiness, and has thus given proof that the general confidence, both here and abroad, in our country's commercial soundness has been abundantly justified.

"In this state of things it was strongly felt that it was the duty of the Bank, as far as it could possibly do so, to assist its mercantile customers during the period of deflation and to enable them to pass through it without anything in the nature of misfortune. By wise forbearance here and there the Bank has, in great measure, eased, and in many cases entirely prevented, what might have been an unfortunate situation. This policy has been found to be entirely justified. We have no doubt of ultimate recovery and restoration of normal conditions, and firmly believe in adopting a course which will enable the passing experience to be borne with equanimity."

* * *

Royal Bank of Canada

Sir Herbert Holt, president of the Royal Bank of Canada. strongly urged the necessity of economy in management and operation at the present time. If prices of commodities were not to rise to any extent, but were, as many thought, to experience a slow decline over a period of years, profits could only be maintained by increased economy and efficiency in management. These remarks on economy had special force in their application to federal, provincial and municipal governments. These had disposed of securities abroad with the result that a large proportion of tax payments goes out of the country in the form of interest.

While the scope and character of the existing depression in world trade forbade the hope of an early or easy return to prosperity he did not think that Canadians needed to feel any great apprehension as to the future. The unprecedented decline in prices, which was the worst feature of the last year and a half could hardly be repeated. He trusted that the coming period would be one of salutary economy, both in public and private life, the best preparation for renewed prosperity.

E. L. Pease, vice-president and managing director, in seconding the motion for the adoption of the directors' report, said in part:—

"The year just ended has proved a very trying one for the commercial community and for the banks. Never before have we been confronted at home and abroad with so many difficult problems and such adverse conditions. The rapid and severe recession in the prices of all commodities and the lack of purchasing power involved heavy losses in inventories and a great shrinkage of domestic and international trade.

"The price recession has caused a decline in the productivity of all manufacturing industries and a consequent fall in profits, so

much so that taxation has become a serious burden, accentuating our need for a larger population among whom it could be shared.

"In this period of exceptional stress the banks have played a most helpful part. How important may be judged from the fact that business demoralization which occurred in every other country was averted in Canada. This may b eregarded as one of the greatest achievements of the Canadian banks.

"In the case of farmers the readjustment of values is complete. They have been compelled to accept a lower net return for their products than before the war. The reduction in manufactured goods has been less drastic. General wholesale prices, although 36 per cent. below the high price reached in 1920, are still 68 per cent. above 1914 levels. In the end production costs and selling prices must come down to the buying power of the farmers. The sooner this is effected the sooner busines will revive.

The Western Wheat Crop

"The movement of the Western wheat crop has been rapid. Between September 1st and December 30th, 175.000.000 bushels were delivered at country points, representing an increase over the previous year of 24.000.000 bushels, while shipments East from Port Arthur and Fort William amounted to 117.000.000 bushels, which compared with shipments in 1920 of 88.000.000.

"The Dominion Government's revised estimate of the 1921 wheat crop places the yield for Canada at 329.000,000 bushels. This estimate should bring Canada close to first place among the wheat exporting countries of the world. It is interesting to note from the latest figures published by the Dominion Bureau of Statistics that this large crop is valued at only $283.000.000 as compared with a value of $427.000,000 placed on a considerably smaller crop the previous year. The total value of field crops of 1921 is given as $986.000.000, a reduction of 0469.000.000 from the final estimates of the previous year. Since our prosperity depends on a constant increase in the output of farm products, it is gratifying to note that in spite of hard times in the West, no substantial reduction is expected in the acreage which will be sown to wheat this year.

"A blow to our export trade was the imposition six months ago of the Fordney Emergency Tariff. Since the Act became effective the total value of the agricultural products shipped from Canada to the United States has shrunk from $98.455.000 over the corresponding period of 1920 to $25,928.000. To sell our surplus we are now dependent upon financially demoralized Europe and are seeking new markets in the East. In spite of these unfavorable factors, we show a favorable balance in trade, amounting to $55.000.000, instead of the unfavorable balance to $56.000.000 which accrued during the twelve months ending November, 1920. Our excess of imports from the United States has been reduced from $382.000.000 in 1920, to $220.000.000 in 1921.

Course of Exchange

"The change in world conditions during the past twelve months may be fairly measured by the course of exchange. All the nations of Western Europe have improved their monetary position, but, with the notable exception of Switzerland, the paper currencies of the Central and Eastern countries continue to depreciate. The German mark, the Austrian crown and the Russian rouble approach the vanishing point. In the Far East there has been no great change. The currency of Japan still hovers around parity. Throughout South America there has been a heavy fall. The premium on American funds in Canada has declined during the year from 15 per cent to 5½ per cent. at this date, due to our more moderate purchases and loans made in the United States.

"Already we are feeling the benefit of the new preferential Tariff Agreement with the British West Indies, and Canadian shipments of flour show a decided increase since the preference went into effect. The buying power of the Islands is still restricted, as prices for tropical products remain discouragingly low.

"That England is alive to the economic possibilities of her West Indian Colonies is shown by her action in sending out a strong Committee to inquire into the most effective means of developing these Islands.

"It is to be hoped that the claims of British Guiana will not be overlooked in the development of Crown Colonies. An expenditure of twenty million pounds sterling has been authorized for public

THE ROYAL BANK OF CANADA

A Message to Canadians

ONLY by increasing the sale of Canadian commodities can we avoid increasing our foreign indebtedness. Never, even in war time, was it so essential to increase our exports.

A DUTY falls on manufacturers to produce articles of a quality and price that will compare favorably with foreign makes, and on our agricultural interests to increase production.

THE ROYAL BANK OF CANADA

Total Resources $500,000,000

THE
MERCHANTS BANK OF CANADA

Head Office, MONTREAL Established 1864

Paid-Up Capital	**$ 10,500,000**
Reserve Fund	**9,743,375**
Total Deposits (April 30th, 1921)	**154,911,487**
Total Assets (April 30th, 1921)	**190,367,409**

President ..... Sir H. Montagu Allan, C.V.O.
Vice-President ..... F. Howard Wilson
Acting General Manager ..... H. B. Mackenzie
Acting Assistant General Manager ..... S. C. Norsworthy
Supt. of Branches and Chief Inspector ..... T. E. Merrett
General Supervisor ..... W. A. Meldrum

Collections for Manufacturers

The Merchants Bank can assist very materially your own Collection Department in obtaining acceptances and making prompt returns on Drafts, Notes and other Financial paper.
The Merchants Bank now operates hundreds of branches in Canada, extending from coast to coast; as well as offices in New York and London, England and reliable correspondents throughout the commercial world. These facilities assure Manufacturers, Wholesalers, Importers, and Exporters that their collections will be made quickly and efficiently at lowest possible cost.

399 Branches in Canada extending from the Atlantic to the Pacific, of which 149 are in Ontario, 47 in Quebec and 180 in Western Canada.

NEW YORK AGENCY - 38 WALL STREET

works of immediate importance in the Colonies, and loans amounting to six million pounds have already been raised for improvements in Ceylon and Nigeria. The construction of the long projected railway through the interior of British Guiana to the border of Brazil would not only render accessible Crown lands, rich in natural resources, but would indirectly benefit Canada, whose trade and interests in Britain's South American possession are steadily increasing.

"Our Foreign Trade Department has had numerous inquiries directed to it on the subject of West Indian trade. It has been able to place many Canadian firms in touch with reliable houses in other countries. We find the trade information service which we are able to give is quite an attraction to the firms from other countries who are establishing plants in Canada with a view to doing business in the broad markets of the British Empire."

For the coming year the outlook, he said, was hopeful. It was generally believed that the worst of the depression was past and that a gradual improvement would set in. Canada's progress depended largely upon the satisfactory adjustment of international economic questions, as we were closely linked with the outside world.

* * *

Dominion Bank

At the annual meeting of the Dominion Bank shareholders on January 25th, C. A. Bogert, general manager, expressed the opinion that present conditions called for leniency on the part of banking institutions until improvement was manifested.

"It must be obvious," he said, "that practically every class of industry in Canada has suffered losses more or less severe during the past year, due to a further rapid fall in the value of commodities, accentuated by a continued lack of purchasing power. It is certain that business depression will not continue indefinitely, and, in the meantime, it should be the policy of every Canadian bank that the owners of any business, whose integrity is unquestioned, whose ability has been tested, should be assisted to the utmost, not only in their own interests, but for the preservation of credit and confidence throughout Canada."

With regard to the business outlook he said:—"Respecting the future, we cannot expect marked improvement until we harvest another crop—with a more abundant yield than in 1921—until we are better able to distribute our products with fair returns, and until we can improve our foreign export markets, which have been greatly affected during the past year by adverse legislation by the United States. On the other hand, since January, 1921, a vast liquidation has taken place, and we can reasonably assume that stocks of commodities are now on a sound level, or nearly so. That we shall successfully pass through this trying period no one can doubt. In the meantime, hard work, efficiency and economy should be our aim until we emerge eventually to a new era of prosperity on a better basis, greatly benefited by our unpleasant experiences, and better able to cope with the further development which will undoubtedly be Canada's portion. When that period arrives, there will be no lack of funds for desirable business—there is no credit stringency in sight in this country."

Speaking at the annual meeting of the Bank of Nova Scotia, H. A. Richardson, general manager, said: "Nineteen-twenty-one will be

* * *

Bank of Nova Scotia

memorable the world over as a year of unprecedented perplexities. Whole stocks of high-priced raw materials and manufactured goods were liquidated only at enormous losses. Our markets have been dull and trade in many lines stagnant.

"In our Western Provinces the results of the year have been particularly disappointing. We may feel gratified that in Canada we have come through as well as we have, for, compared with the enormous losses sustained by the commercial and financial interests of other countries, ours is small indeed.

"If conditions are to be adequately met, radical reductions must be made in retail prices, and what is, perhaps, the most important of all, there must be acceptance by Labor of a scale of remuneration materially lower than the abnormally high level upon which the previous great demand had placed it. There is pressing need for readjustment in freight rates, for they are at present oppresive to manufacturing and agricultural interests alike."

Investment Service

The Bond Department of this Bank is in a position to obtain accurate and invaluable information regarding any Canadian or Foreign Securities in which you may contemplate investing.

At all times we deal in Government and Municipal Bonds. 345

IMPERIAL BANK
· OF CANADA ·

Capital Paid Up $7,000,000 Reserve Fund $7,500,000

HEAD OFFICE - TORONTO

Foreign Banking Service in Canada's "Queen City"

The Union Bank of Canada placed a branch of its Foreign Department in Toronto, because of the importance of the "Queen City" in national and international commerce.

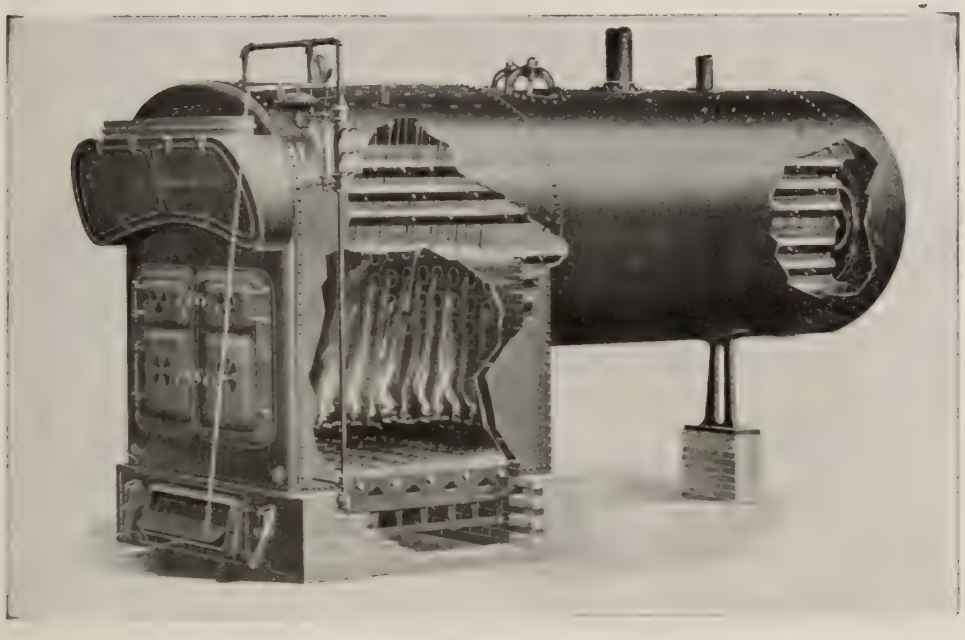
This location and private wire connections between branches in New York, Montreal, Toronto, Winnipeg and connections with Vancouver enable us to keep closely in touch with conditions in Canada and abroad.

Through continual operations in the exchange markets of Canada, the United States, Great Britain and world centres, we are able at all times to handle international exchange at closest possible rates.

Union Bank of Canada

BOILERS

OF ALL KINDS



"Inglis" Portable Firebox Heating Boiler

We also make Tanks, Stacks, Water Towers, Steel Plate Work, Engines and Pumping Machinery

For over sixty (60) years we have been leaders in our lines.

We can guarantee prompt delivery.

Send for Catalog, prices, etc.

The JOHN INGLIS COMPANY, Limited

14 STRACHAN AVE., TORONTO, CANADA

Eastern Representatives—JAS. W. PYKE & CO., LIMITED, 232 St. James St., Montreal

Ottawa Representative—J. W. ANDERSON, 7 Bank Street Chambers

William Davies Company

Annual Report for Year Ended September 24th, 1921, Shows Loss

For the year ended September 24th, 1921, the first annual report of the William Davies Company, Inc., and subsidiary companies showed losses on operations of packing plants amounting to $829,428. Income from interest and dividends reduced the loss to $686,477 and addition of interest on borrowed money and bonds brought the total loss before depreciation was charged to $1.235,673.

In the president's statement to the shareholders the year is characterized as "the most disastrous in the company's history." The company's business in Great Britain had been injured by the coal strike there. The losses, however, have been taken care of and since October 1st the company have been operating on a profitable basis.

The balance sheet shows total assets of $14,232,907, of which property account represents $7,776,077. Current assets are given at $5,866,929 against current liabilities of $5.001,301, leaving a net working capital of $965,628.

Decrease in Earnings

Less Satisfactory Annual Statement for Brompton Pulp and Paper Company, Limited

The annual statement of the Brompton Pulp and Paper Company shows an appreciable decrease in earnings, which, after deducting expenses, insurance and income tax, are set at $1.097,784, as against $1,853,588 a year ago. Deductions for depreciation, bond interest and preferred dividends left a balance of $498 010, which is equal to a return of slightly over 7 per cent. on the common stock. This compares with 9.57 per cent, a year ago and 9.86 for 1919.

The outstanding point in the statement is the large amount written off for inventories, which, according to a director, brings them down to present market values. Inventories are set at $3,130,931, against $2,476,604 last year, and from these is deducted $944,964 to allow for the shrinkage in values. The report of the directors points out that in May last the issue of $2,500,000 8 per cent. convertible sinking fund bonds was issued to reimburse the company in part for amount spent on plant and property, and that improvement in sales and in the company's financial position made it possible to restrict this issue to $1,750,000, at which figure it now stands.

The profit and loss statement shows that after allowing for the heavy writing off of inventories there is carried forward a balance of $811,625, which is compared with $1,643,579 at the end of the previous year. It should be noted that but for the generous allowance on inventories the balance at profit and los would have shown an increase over that of a year ago.

Earnings are Lower

Reduced Sales Cause Notable Shrinkage in Profits of Canada Iron Foundries, Limited

Largely reduced sales made during the year under review are reflected in a notable shrinkage of profits, as shown in the annual report of Canada Iron Foundries, Limited, which has been issued to the shareholders. The statement is for the twelve months ending Sept. 30 last. The year's earnings are set at $300,824, as against $603.562 for 1920.

After adding interest and exchange received and $144,855 as last year's surplus at profit and loss, the total remaining was $489,307. Deductions from that amount on account of depreciation, interest and sinking fund, maintenance and preferred dividends, brought the total surplus of profit and loss account to $54,523, as against $144.855 a year ago. A notable point in the statement is that in which bank loans amounting to $402,365 are shown to have been wiped out during the past year.

Current assets are shown as totalling $2.099,313, while current liabilities, including accounts payable, pay rolls, etc., are set at $84.914, leaving a balance of working capital of $2,014,399. The balance sheet shows a notable reduction in inventories, which are set at $683.267, as against $1.090,634. Investments have increased from$636 340 to $711.156, while cash in hand has advanced during the year from $85.543 to $183.858.



ARCTIC METAL

For Cool Bearings



Our specialty is Service—and by Service we mean delivery of a Babbit of *Highest Quality,* at attractive prices.

Back of our Arctic Metal are years of experience, which enables us to supply a metal that will give the best results.

Manufactured by



Tallman Brass & Metal Limited

HAMILTON, ONT.



Does Price interest You?

When you figure the price of a gallon of paint there are certain fixed costs that must be reckoned with before you can arrive at a true figure:

1—The price per gallon.
2—Cost of labor for appplication.
3—Length of service—Cost per year.
4—The ultimate cost.

Low price generally means low quality. The immediate saving effected when you buy paint on the basis of low price is invariably wiped out in a short time. Frequent repaintings with additional outlay for material and labor—lack of service and protection—run up the maintenance bill to unwarranted figures.

If you buy paint priced at a figure that will permit the manufacturer to produce good paint—without skimping—you invariably get a better investment in the long run, even at a higher price per gallon.

The price of Degraco Paints has been reduced in proportion with production costs. You pay only the manufacturer's low margin of profit when you buy Degraco Paints.

Degraco Paints are made in all colors for all purposes:

Superior Graphite Paint for the protection of structural steel and metal.
Sta-White, the pure white oil paint for walls and ceilings.
Degraco Colors for houses and industrial use.
Degraco-Tone, the flat wall paint.
Degraco Brick and Concrete Paints.
Enamels, Dampproof, Gas Holder Paints and a score of others.

Degraco Paints are high quality coatings proven in service. Use them for true economy —low ultimate cost.

DOMINION PAINT WORKS, LIMITED

Makers of Degraco Paints, Varnishes, Enamels

WALKERVILLE - - - - - - CANADA

Montreal
Quebec
Toronto
Calgary
Edmonton

Winnipeg
Halifax
St. John
Regina



Sta-White— *a pure white, light-reflecting oil paint for industrial interiors. It stays white. The mill white you can rely upon.*



Superior Graphite Paint—*a protective coating for structural steel, bridges, metal roofs, stacks and all metal surfaces.*



Degraco Paints, Varnishes and Enamels *are made in all colours for interiors and exteriors, for every service requirement.*



Degraco Brick and Concrete Paints—*for interiors and exteriors. Concrete Walls. Floor Paint, Floor Hardener, Damp-proofing.*



Degraco-Tone—*an oil paint in flat finish for interior use on plaster walls, woodwork, wall board, concrete, tile, metal ceilings.*

DEGRACO

Paints - Varnishes - Enamels

Dominion Bridge Company

Considerable Decline Shown in Gross and Net Earnings During the Past Year

The annual statement of the Dominion Bridge Company, Limited. for the fiscal year ended October 31, 1921, sent forward to shareholders, shows the considerable decline in both gross and net earnings, which was to have been expected under the circumstances which have prevailed during the period under review, falling prices and stagnation of business having contributed to the shrinkage in profits. Net earnings for the year were $378,693, or 5.8 per cent. on the capital stock of the company, as compared with 14.8 per cent. in 1920, and 26.6 per cent. in 1919. In the declaration of the regular quarterly dividends of the company it was necessary to draw upon the substantial surplus profits, which the company have been able to set aside in previous years.

The gross profits for the year were $623,737, the lowest in the history of the company. Deducting from these profits, depreciation on plant and machinery at the rate established in previous years, reserves for doubtful accounts, etc., the net earnings become $378,693. Included in the item for doubtful accounts, which it may be noted is unusually high, is the reserve for Federal taxes. This, together with a greatly increased reserve for depreciation, brings the total deduction to $245,043, as compared with $161,361 for the previous year.

Despite the adverse conditions which obtained during the year 1921, the balance sheets show the company to be in a very favorable position for operation when more favorable conditions arise.

Profits Are Lower

Sherwin-Williams Company of Canada, Limited, Issue Annual Report

The annual report of the Sherwin-Williams Company of Canada, Limited, Montreal, shows a striking reduction of profits. After providing for depreciation, renewals, bond interest, dividends and taxes, the balance for surplus account is $2.188, as compared with $733,909 for the previous year. A feature of the report is the payment during the year of $180,000 in dividends on the common stock, which did not appear in the last annual report.

In the statement of earnings, before allowing for depreciation, interest, dividends, taxes, etc., which is shown as $631,211, as against $9,281,338 last year, there is included a balance of $376,190 surplus arising from the sale of the capital stock of the old Berger Companies.

The profit and loss statement shows: Earnings, $631,211; depreciation, $80,875; bond interest, $123,917, compared with $126,194; preferred dividends, $239,750, unchanged from previous year; common dividends, $180,000; to tax account, $4,480; net earnings, $2,188; previous surplus, $3,417,961; total surplus, $3,420,150.

The balance sheet section of the statement shows that the company retains a satisfactory position in regard to working capital. The current assets are set at $4,813,677, and current liabilities at $1,145,178, thus leaving a balance of working capital of $3,668,499, and it is to be noted that the current assets are over 2½ times the current liabilities. The statement shows that the cash on hand has increased during the year from $240,676 to $763 850, and reserves and surplus now amount to $4,254,769, equal to over 106 per cent. on the common stock.

The favorable showing as above is made possible by notable reductions in bills and accounts payable, the former having declined $517,083 and the latter by $300,796. Under the heading of investments is shown a decrease of $639,861 in the company's holding of stock in the Lewis Berger Companies, due to the sale of a part of the stock held. Last year's balance of special reserve fund amounting to $100,000 is shown as applied to the reduction of inventory values at this date.

Issue New Catalogue

The Benjamin Wheel Company, Limited. Yarker, Ontario, have issued their catalogue number 7, describing their lines of wire-woven crates, baskets, etc. The various products are illustrated by half-tone reproductions of photographs, and the catalogue thus gives the intending purchaser a clear idea of the goods and is also very attractive in appearance.

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Book Reviews

Industrial Relationships

Industrial Government. By John R. Commons in collaboration with eight other investigators. Toronto: The Macmillan Co. of Canada.

A group of Wisconsin manufacturers desiring to know the best practice in dealing with labor that the country afforded, financed an investigation carried on by Mr. John R. Commons and eight other investigators. Industrial government as described in books, papers and pamphlets was thoroughly canvassed and studied from the different points of view of the several investigators, after which visits were made to a number of different kinds of industrial plants and an intimate study of employment relationships made and described.

The first eighteen chapters of the book are devoted to very excellent descriptions of the methods in use in eighteen different establishments, some of which are such well known concerns as the White Motor Company of Cleveland, Ohio; the Ford Motor Company of Detroit, Michigan; Link Belt Company of Philadelphia, Chicago and Indianapolis; Joseph and Feiss of Cleveland, clothing manufacturers; Hart, Schaffner & Mark, Chicago; Dennison Manufacturing Company, Framingham, Mass, and a number of others. The five remaining chapters of the book are generally described as inferences" arising out of the analytical studies comprised in the previous chapters.

The following quotations, taken at random from these inferences, may serve as an index to the character of the results which were reached by this very thorough investigation:

"From 10 per cent. to 25 per cent. of American employers may be said to be so far ahead of the game that trade unions cannot reach them. Conditions are better, wages are better, security is better, than unions can actually deliver to their members."

"No one can squarely defend all the restrictive policies of unions, but if they are carefully examined, as we have tried to do, they will be found to be not so very different from the restrictive policies of employers and of non-unionists."

"What we find that labor wants, as a class, is wages, hours, and security, without financial responsibility, but with power enough to command respect."

"The failure of profit sharing . . . was the inability of labor as a class to see further than present wages, and hence their inability to share in the management's present responsibility for future profit and loss."

"It is not labor or management or machinery that produces wealth—it is the credit system, and the credit system is nothing but confidence in the future."

"Socialism, anarchism and trade unionism all have their source in this fear of unemployment, and the inability of capitalism to give security to the job as it has given security to the investment. They are wrong in so far as they conclude that by destroying security of investments they can obtain security of jobs."

"It is management that attracts capital through the confidence of investors, for the bulk of investors like the bulk of labor do not want to, and cannot, manage industry."

"The active administration of industry is not always in the hands of the owning capitalist; he simply hires the management as he hires other employees. He places his capital in the hands of management just as management places tools and machinery at the disposal of workmen, and naturally tries to hire the management which will make the best use of his capital, pay him big dividends and keep his capital safe. This means that the most efficient management usually gets the biggest opportunities."

It is a readable book, and every employer who is giving study to industrial relationships will find it of particular interest. If he should have any doubts in regard to the efficacy of his own methods of dealing with the labor problem the results of other methods in use by large manufacturers as described in this book may help him to arrive at definite conclusions.

—J. M. M.

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33

Guide to Saskatchewan

Wrigley's Saskatchewan Directory, 1921-22. Wrigley Directories, Limited, Regina, Saskatchewan. Price $10.

This is the first directory of Saskatchewan to be published and it has been produced along similar lines to the Alberta and British Columbia directories, which are also published by Wrigley Directories, Limited.

The result is an excellent book of reference, clearly printed, well bound and convenient in arrangement.

The directory proper covers 2,117 cities, towns, villages and settlements, treated alphabetically, with a description giving location in section, township, range, Federal and Provincial Electoral districts, Land and Judicial Districts, also Municipality Number, population, railroad or nearest station, express, telegraph, telephone and banking point, value of lands, crop averages, etc. The classified business directory indexes the business interests of the Province under some 600 headings, and is excellent for quick reference.

In addition to these main sections, there is an introductory having to do with the early history, resources and development of Saskatchewan. Among the wide variety of subjects treated, are included area and surface, agricultural resources, with statistical tables and articles on mixed farming, dry farming, irrigation, crops, live stock, dairying, wool production, co-operative organizations, minerals, timber, game and fisheries, education, schools, university, laws for women, returned men, Temperance Act, highways, bridges, ferries, the scope of municipal and industrial development and also transportation facilities are fully discussed. Halftones and charts are used to illustrate this excellent and comprehensive treatise. There is also an outline of the government of the province. The government departments and officials are listed so that the scope and personnel of all departments are shown.

There are many interesting figures about Saskatchewan to be found in the book. The province now has 7 cities, 78 towns, 337 villages and 301 rural municipalities. Natural resources include 100,000,000 acres of forest of which 45,000 acres is commercial timber; 8 billion board feet of saw lumber; 55 million cords of pulpwood; 100 million cords of firewood; a sodium sulphate deposit of 6,000,000 tons; and deposits of copper, gold, silver, gypsum and salt. There are 225 factories and 115,000 farms. It produces 40 per cent. of the Dominion's yield of spring wheat and eight times in nine years has won the world sweepstakes for the best wheat, as well as many first prizes and championships for other cereals, vegetables and grasses.

The Wage Question

The Wages of Labour. By William Graham, M.P., M.A., L.L.D. Toronto:—McClelland & Stewart, Limited. $1.75.

In his preface Mr. Graham defines the purpose of his book as "an attempt to summarize briefly some of the immediate issues, especially in the light of post-war economic conditions; and to suggest a wages programme for employers and workers."

In the earlier chapters the old time-wages system, and the newer co-partnership and profit-sharing system are weighed in the balances and found wanting.

The time-wages system is found to be undesirable from the standpoints alike of employer, worker and consumer. The employer does not get good service; the consumer does not get cheap goods —except in the rare cases where thereis sufficiently free competition in production to force to the wall the employer with the top heavy wage-bill; the worker does not give his best and therefore loses in self-respect and in initiative, and ultimately, in pocket.

The newer co-partnership and profit-sharing systems are also rejected, perhaps too quickly. No permanent solution of the wages problem can, it is declared, be looked for from that direction. While such schemes may appear to answer when employment is plentiful and profits are high, or at least, steady, they do not stand the acid test of hard times and absence of profits. They are suspect in the eyes of the workers, who, apart from the disadvantage of the deferred payment feature and of the uncertainty as to the existence of profits to be shared, are apt to see in them an attempt to check the increase in wage-rates and to undermine collective bargaining. The employer on the other hand, in these days of the rapid increase



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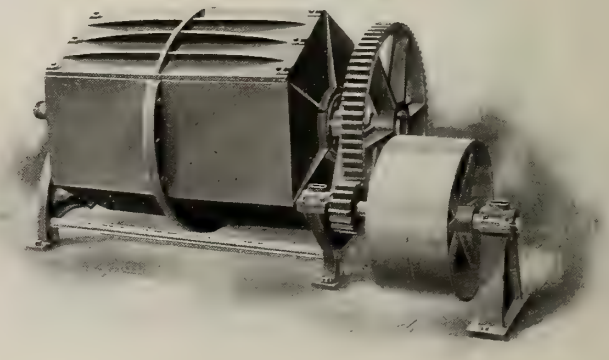
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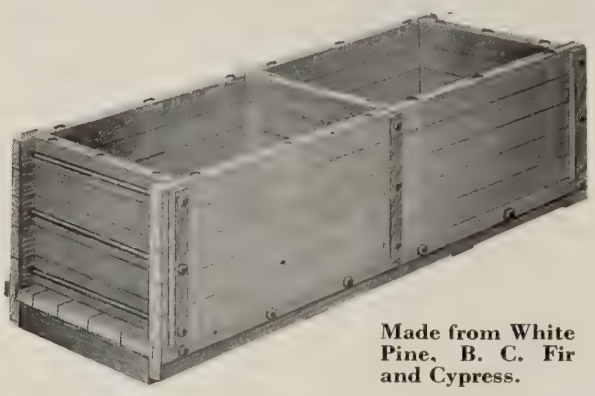
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of social legislation and taxation, is inclined to feel that profit-sharing schemes are a work or supererogation.

These two systems discarded, Mr. Graham proceeds to outline what in his opinion is the policy most likely to provide the solution, i.e. a policy of scientific management based, so far as wages are concerned, on payment by results. Such a system will be readily admitted to possess many advantages from the point of view of employers; the workers, however, are likely, it is recognized, to raise serious objections. In the first place probably the majority of workers at the back of their minds are convinced that there is only a definite amount of work to be done, and that if there is any substantial speeding-up as a consequence of payment by results it will mean serious unemployment. This is, of course, the old argument against machinery and the answer undoubtedly is that ultimately such a system will give more employment. A second objection which is raised by the workers is, that the payment-by-results system fosters jealousy and rivalry between workers, destroys co-operation and incidentally is very hard on the weaker men and women. The answer to the first point seems to be that the trades unions which have admitted this system have not suffered from the evil in question, and so far as the case of the weaker worker is concerned, while provision should certainly be made for them, the need for such provision should not be made a governing consideration in deciding upon a wages policy. The final objection likely to be raised by the workers is more serious, namely, that the payment-by-results system leads to undue strain and fatigue and to the untimely wearing out of the workers. The importance of this point, and the fact particularly in the United States increased efficiency, larger production and enhanced remuneration have been purchased at too great a price. Mr. Graham quite recognizes, but the remedy, he declares, is not less scientific management, but more.

But it is in his discussion of the practical working-out of the payment-by-results system that Mr. Graham makes his most constructive suggestions. The first question obviously is: How are the rates of pay to be fixed? His answer is, not by the employer alone, but by consultation and agreement between employer and employee. And in such conference all the cards should be laid on the table, face up, including full information as to the earnings of the business. In other words the question of the remuneration to be given to labour should not be settled independently of the question of the remuneration to be given to management and to capital. What the relationship is to be and how rates of wages are to be determined by earnings and dividends is not discussed,—probably for the reason that Mr. Graham does not regard the present "capitalist" system as anything more than a temporary thing. It is inevitable, he believes, that the development from works council, to trade council, to join industrial council, will end in some form of guild system under which the management and control of each industry will be entrusted to the people of all classes engaged in it.

It is at this point that we, with out experience on this continent to guide us, part company with Mr. Graham. It may be that we are simply a stage or two behind in a development that is proceeding just as much in America as in Europe, but we cannot admit that the time has come completely to scrap the present system. Imperfect as it obviously is, it has, in many respects, served mankind extremely well and the experience of the race has been that it is better to mend than summarily to end an institution of that

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kind. Mr. Graham's point of view is largely coloured by his belief that nation-wide trades union organization is here to stay. The experience of this continent is rather that if works councils were properly developed the workers would tend to think more and more in terms of their own plant and less and less in terms of an artificial nation-wide union. If this is sound, would it not be wise, before scrapping the entire private-ownership system, to explore to system to the changed needs and demands of to-day?

—H. W. Macdonnell.

Canadian Finance

The Annual Financial Review. Canadian. July, 1921. Compiled by W. R. Houston. Toronto:—Houston's Standard Publications. $10.00.

Year by year this valuable annual reference book takes on added importance through the extension of its field by the inclusion of additional information. Particularly as regards its treatment of industrial corporations does it merit the approval of manufacturers and those interested in manufacturing industry. There are now listed in its table of contents 230 manufacturing companies, by far the largest list of any class of institution or corporation dealt with in the book. They include all the leading industries of Canada, the securities of which are in the hands of the public.

Necessarily the information supplied in such a volume concerns itself primarily with the financial or investment side of a company's affairs, but, in determining the character of an investment so much depends on a knowledge of the history of a business, its management, the extent of its properties and other assets, its capacity and output, etc., that it becomes desirable to include such material. All this has been carefully attended to in the compilation of the annual Financial Review and we find that, in the case of each company listed, there is a wealth of information brought together that enables an investor to size up its standing pretty accurately.

Of course, the financial aspect is prominent and there are supplied details of capitalization and bonded indebtedness, copies of the latest balance sheets and annual reports and a very valuable record extending back for several years, of the movement of stocks in the stock market. The dividend record of the company's dealt with is also a useful addition to the other information, while there are various other serviceable details contributory to the general usefulness of the book.

While industrial companies are to the fore, this does not mean that other companies are neglected. Equally complete information is given about the chartered banks, insurance companies, mining companies, light and power companies, railways, navigation companies, etc. In fact it requires a book of nearly 800 pages to hold all the data which has been gathered together.

The work is really beyond criticism. It apparently quite attains the object which its compilers have had before them and to any one who has any reason whatever for familiarizing himself with the financial standing of Canadian companies, its possession becomes most desirable.

Industry in Saskatchewan

First Annual Report of the Bureau of Labour and Industries of the Province of Saskatchewan. Regina, 1921, the King's Printer.

This report covers the first year's work of the Bureau of Labour and Industries, since its re-organization. An important part of its enlarged field is the promotion of the development of natural resources, and two experienced engineers have been engaged, one to study the immense clay resources of the province, the other to carry on general geological work. The activities of this branch are not yet available for publication, but should form an important part of succeeding reports.

The report deals with coal production, mining of various kinds, lumbering, fisheries, manufacture, exploration, building construction, and various related activities, such as factory inspection and the work of the minimum wage board. Accident prevention, strikes and the employment service also come under the work of the Bureau and are dealt with in this report.



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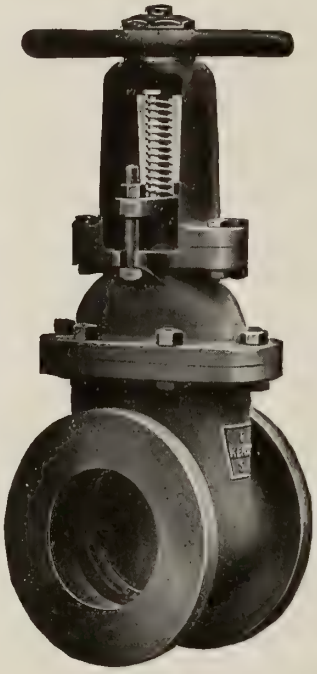
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RAMORE HEAD	Head Line	Ab't Feb. 18

To Southampton and Antwerp

SCANDINAVIAN (Cold Stge)	Can. Pac. S.S. Ltd.	Ab't Feb. 18
CORSICAN (Cold Stge)	Can. Pac. S.S. Ltd.	Ab't Mch. 11

To Hamburg

BATSFORD (Sirocco Fans)	Can. Pac. S.S. Ltd.	Ab't Feb. 18

To Havre and Bordeaux

BRANT COUNTY	I. C. Transports Ltd.	Ab't Feb. 12

To Rotterdam and Hamburg

LORD ANTRIM	Head Line	Ab't Feb. 10
CARRIGAN HEAD	Head Line	Ab't Feb. 28

To Havana

¶SICILIAN (Cold Stge)	Can. Pac. S.S. Ltd.	Ab't Mch. 23

¶ Via Boston.

FROM ST. JOHN, N.B. AND HALIFAX, N.S.

To Bermuda and British West Indies

	From St. John, N.B.	From Halifax, N.S.
CHAUDIERE	R.M.S.P.Co. Ab't Feb. 5	Ab't Feb. 17

To St. John's (Newfoundland)

MAPLEDAWN	Canada Steamship Line	Ab't Feb. 6
MAPLEDAWN	Canada Steamship Line	Ab't Feb. 22

* Sail from St. John.

FROM HALIFAX

To Barbados, Trinidad and Demerara

CANADIAN LOGGER	C. G. M. M. Ltd.	Ab't Feb. 10
CANADIAN HARVESTER	C. G. M. M. Ltd.	Ab't Feb. 24

To Nassau, (Bahamas) **Kingston,** (Jamaica) **and Belize** (British Honduras)

CANADIAN FISHER	C. G. M. M. Ltd.	Ab't Feb. 24

To Australian and New Zealand Ports

CANADIAN MILLER	C. G. M. M. Ltd.	Ab't Feb. 22
CANADIAN PIONEER	C. G. M. M. Ltd.	Ab't Mch. 22

To St. John's (Newfoundland)

ROSALIND	Red Cross Line	Ab't Feb. 7
SABLE I.	Farquhar Co. Ltd.	Ab't Feb. 8

FROM VANCOUVER

To Kobe, Yokohama and Shanghai

†CANADIAN INVENTOR — † Will call at Kobe and Yokohama.
Can. Govt. Mer. Mar. Ltd. Ab't Feb. 15
MELVILLE DOLLAR — Can. Robert Dollar Co. — Ab't Feb. 20

To Kobe, Yokohama, Hong Kong, Manila and Singapore
To Kobe, Yokohama, Shanghai, Hong-Kong, Manila, Moji and Nagasaki

ARABIA MARU	Osaka Shosen Kaisha Line	Ab't Feb. 9
†*§TOYAMA MARU	Nippon Yusen Kaisha Line	Ab't Feb. 9

To Australian and New Zealand Ports

‡MAKURA	Can. Astralasian Line	Ab't Fea. 10
WAIIOTAPU	Can. Astralasian Line	Ab't Fea. 10
CANADIAN SCOTTISH	Can. Govt. Mer. Mar. Ltd.	Ab't Feb. 17
‡NIAGARA	Can. Australasian Line	Ab't Mch. 17

To Calcutta and Bombay (India)

CANADIAN TRAVELLER	Can. Govt. Mer. Mar. Ltd.	Ab't Jan. 25

‡ Will also call at Honolulu and Suva.
* Does not call at Moji.
† Does not call at Manila.
§ Does not call at Shanghai or Hong-Kong.

CANADIAN GOVERNMENT MERCHANT MARINE LTD.

Canada's Commerce Carriers

In Conjunction With

Canadian National Railways

Operate Services

To all Parts of the World

REGULAR FREIGHT SERVICES

FROM ST. JOHN, N.B.

Great Britain—Liverpool, London, Glasgow, Cardiff and Swansea.

FROM HALIFAX, N.S.

Newfoundland—St. John's, Nfld.

Australasia—Auckland and Wellington, New Zealand, Sydney, Melbourne and Adelaide, Australia.

British West Indies—Barbados, Trinidad and Demerara, Nassau, Bahamas, Kingston, Jamaica and Belize, British Honduras.

South America—Rio de Janeiro and Santos, Brazil, Montevideo, Uruguay and Buenos Aires, Argentina.

FROM VANCOUVER, B.C.

Australasia—Auckland, New Zealand, Sydney and Melbourne, Australia.

China and Japan—Yokohama, Shanghai, Taku Bar.

India and Far East—Calcutta and Bombay.

REGULAR PASSENGER SERVICE

Nassau—Kingston—Belize - - Every Three Weeks

Excellent Accommodation - - Cuisine Unsurpassable

R. B. TEAKLE,
Manager
Montreal, Que.

F. G. WOOD,
General Ontario Freight Agent
Toronto, Ont.

W. A. CUNNINGHAM,
General Freight Agent
Montreal, Que.

MACDONALD MFG. CO., Limited

Toronto - Canada

Manufacturers of

PLAIN and LITHOGRAPHED CONTAINERS

for

Jam	Lard
Fruit	Oil
Vegetables	Paint
Meat	Varnish
Syrup	Tobacco
Butter	Talcum
Biscuits	Tea

Grocers' Sundries
Druggists' Sundries

Also Toys, Novelties, Tags and Advertising Signs

Well packed is half sold
Make your containers advertise you

Office and Works :
145 Spadina Avenue

Shurly & Derrett Limited

TORONTO

TRADE MARK.

Manufacturers of

TWINES of all kinds



The Original and Only Genuine

¶BEWARE OF IMITATIONS SOLD ON THE MERITS OF—

Minard's Liniment

Office and Laboratory : Yarmouth, N.S.
Branch Factory : St. John's, Newfoundland

Bureau of Canadian Information

Ask the Canadian Pacific about Canada

CANADIAN PACIFIC RAILWAY

THE CANADIAN PACIFIC RAILWAY, through its Bureau of Canadian Information, will furnish you with the latest reliable information on every phase of industrial and agricultural development in Canada. In the Reference Libraries maintained at Montreal, Chicago, and New York are complete data on natural resources, climate, labor, transportation, business openings, etc., in Canada. Additional data is constantly being added.

No charge or obligation attaches to this service. Business organizations are invited to make use of it.

CANADIAN PACIFIC RAILWAY
Department of Colonization and Development

165 E. Ontario St. Chicago — 335 Windsor Station Montreal — C. P. R. Bldg., Madison Ave. at 44th St., New York

Recent Trade Enquiries

A list of Enquiries Received from Various Sources including the Canadian Trade Mission, London; the Canadian Trade Commission, Ottawa; the Department of Trade and Commerce, Ottawa; and the Commercial Intelligence Department, C. M. A. Toronto.

Domestic.

S04.A. Advertising or Sales Manager: An energetic Canadian with considerable high class experience and training in advertising and salesmanship, who was connected for some years with a well known American firm that operated in Canada, desires to get in touch with enterprising Canadian firms who are interested in up-to-date methods of advertising and salesmanship.

Foreign.

S05. Sugar: A Cardiff firm who are specially interested in offers c.i.f. quotation for 50-ton lots of Canadian granulated sugar.

S06. Food Products: A Bristol firm wishes to get into touch with first-class Canadian packers of canned meats, salmon and fruits; boxed meats; lard, butter and cheese.

S07. Condensed Milk: A South Wales firm wish to represent a Canadian firm of note producing condensed milk.

S08. Flour: A prominent manufacturing firm in Mexico desources, for use in the manufacture of explosives. Prices sires to receive supplies of wood flour from Canadian may be submitted either f.o.b. Montreal or c.i.f. Tampico. A limited amount of this product is required at present, but if satisfactory, arrangements can be made for larger quantities required at a later date. Correspondence in English, French or Spanish.

S09. Paper: A large importer of paper in Mexico City is prepared to enter into negotiations with Canadian manufacturers of all classes of paper with the exception of kraft and newsprint. Samples, prices and all particulars should be submitted with first letter. Exclusive agencies desired. Correspondence in English or Spanish.

S10. Strawboards: A Midlands firm would like to have samples and quotations of strawboards which, if price competitive, would purchase.

S11. Woodenware and Hardware: A Bristol firm are open to take agencies for Canadian exporters of furnishing woodenware and hardware.

S12. Dowels: A firm in Birmingham buys wood dowels in lengths 30 and 36 inches, and of diameters ¼ inch, 5/16 inch, ⅜ inch and ½ inch, also desire to have the best price available for these.

S13. Leathers: A manufacturer of ladies' boots and shoes in Mexico City desires to obtain quotations from Canadian manufacturers of the following: calf leather of all descriptions, box calf, smooth calf, splits, kid seconds of all colours, sheepskins of all colours, suedes of all colours, patent leather, shoe findings. Samples should be submitted, and prices quoted either f.o.b. Canadian points or c.i.f. Vera Cruz. Correspondence in English or Spanish.

S14. Boot and Shoe materials: A prominent British manufacturer of boots and shoes in Mexico City desires to receive quotations for leather of all kinds, glazed paper, cotton linings, rubber heels, and findings, with a view to purchasing supplies from Canadian sources. Prices should be quoted c.i.f. Vera Cruz or Laredo.

S15. Calcium Carbide; Pulp: An old-established and prominent importer in Mexico City, at present representing British and United States houses, is prepared to enter into negotiations with Canadian manufacturers of calcium carbide, paper pulp, and cyanide, with a view to acting as exclusive agents throughout the Republic of Mexico. Prices should be submitted c.i.f. Vera Cruz, and full information given in first letter. Correspondence in English. Excellent references.

S16. Perfumes; Proprietary Medicines: A British firm in Mexico City, with branch offices in New York and Cuba, and with travellers covering the whole of the Republic of Mexico, is prepared to act as representative of Canadian manufacturers of proprietary medicines, drugs, disinfectants, perfumes and similar articles. Exclusive agencies desired, and manufacturers should submit full particulars of prices, range of products, terms, and if possible, catalogues and samples. Correspondence in English or Spanish.

S17. Motors and Accessories: A Birmingham firm are anxious to get the sole selling rights in the United Kingdom for motors, motor cycles, and cycles and cycle accessories, and electric accessories.

S18. Pig Iron; Steel: A Glasgow firm are anxious to open up an import business from Canada, and desire to get into communication with maufacturers of pig iron semi-finished and manufactured iron and steel.

S19. Machinery and Tools: A firm in Cardiff are open to consider the question of importing machinery of all kinds and tools such as agricultural, mechanics and machine.

S20. Mattress Wire: A Midlands house wants quotations on tinned mattress wire as follows: 10 tons 22 BWG; 25 tons 23 BWG; 10 tons 24 BWG. This wire to be wrapped in waterproof paper and packed in barrels. Quotations c.i.f. British port. State delivery.

S21. Labour Saving Device: A firm in London, England, wishes to get in touch with a Canadian company desirous of placing a domestic labour saving device on the English market. This firm is well recommended, has an excellent selling organization and their factory is so equipped that they could assemble any article for which they secure the agency.



Your Best Investment for 1922

Will be new, efficient Boilers, embodying the latest designs and highest grade workmanship such as we make. Many a dividend could be declared out of the coal pile—meaning the one you should'nt burn and would'nt burn if your Boilers were EFFICIENT. We make Boilers in all types and sizes, for power or heating purposes. Prices low.

Engineering and Machine Works of Canada, Limited

ST. CATHARINES, ONTARIO

Eastern Sales Offices:—Hall Machinery Co., SHERBROOKE, QUE., and BIRKS BLDG., MONTREAL

Buyers' Guide to Canadian Manufactures

List of Articles which will Enable the Purchaser to Know the Manufacturers of Made-in-Canada Goods. Rates for insertion in this department, $4.00 per heading per year (12 insertions).

ABRASIVES
*Canadian Hart Wheels, Limited, Hamilton, Ont.
*Dominion Abrasive Wheel Co., New Toronto, Ont.
*Norton Company of Canada, Ltd., Hamilton, Ont.

ACCOUNT BOOKS
*The Brown Bros., Ltd., Toronto.

ACCUMULATORS, hydraulic
*The Hydraulic Machinery Co., Limited, Montreal.

ACETYLENE GAS
*The Prest-O-Lite Company of Canada, Ltd., Toronto, Ont.

ACETYLENE GAS BURNERS
Economic Acetylene Burner Co., Toronto, Ont.
*The Prest-O-Lite Company of Canada, Ltd., Toronto, Ont.

ACIDS
*The Grasselli Chemical Co., Ltd., Toronto.
*The Nichols Chemical Co., Ltd., Montreal, Que.

ADVERTISING NOVELTIES
Lawson & Jones, Ltd., London, Ont.

AERATED BEVERAGES
Charles Gurd & Co., Ltd., Montreal, Que.
J. J. McLaughlin, Ltd., Toronto.

AIR COMPRESSORS
*Canadian Ingersoll-Rand Co., Sherbrooke, Que.
*Smart-Turner Machine Co., Ltd., Hamilton, Ont.

AIR LIFT PUMPS
*Canadian Ingersoll-Rand Co., Sherbrooke, Que.

ALCOHOL
*Canadian Industrial Alcohol Company, Ltd., Montreal, Que.

ALKALIES
Brunner, Mond Canada, Limited, Amherstburg, Ont.

ALUMINUM
*Northern Aluminum Co., Ltd., 1805 Traders Bank, Toronto,

ALUMINUM COOKING UTENSILS
"Ideal" Aluminum Products, Ltd., Toronto.

AMMONIA
Canadian Ammonia Co., Ltd., Toronto, Ont.

ANCHORS, all steel
Beauchemin & Fils, Ltd., Sorel, Que.

ANGLE BARS
*Burlington Steel Co., Ltd., Hamilton, Ont.
*MacKinnon Steel Co., Limited, Sherbrooke, Que.
*The Steel Company of Canada, Ltd., Hamilton, Ont.

ARSENIC
*Deloro Smelting & Refining Co., Limited, Deloro, Ont.

ARTIFICIAL LIMBS
Chesley Artificial Limb Co., Ltd., Hantsport, N.S.

ASBESTOS
Atlas Asbestos Company, Limited Montreal, Que.
*Eureka Mineral Wool & Asbestos Co., Toronto, Ont.

ASBESTOS SHEATHING
*Eureka Mineral Wool & Asbestos Co., Toronto, Ont.

ASBESTOS SHEET AND PISTON PACKINGS
Atlas Asbestos Company, Limited, Montreal, Que.
*Eureka Mineral Wool & Asbestos Co., Toronto, Ont.

ASBESTOS STEAM PIPE AND BOILER COVERINGS
Atlas Asbestos Company, Limited, Montreal, Que.
*Eureka Mineral Wool & Asbestos Co., Toronto, Ont.

ASBESTOS TEXTILES
Atlas Asbestos Company, Limited, Montreal, Que.
*Eureka Mineral Wool & Asbestos Co., Toronto, Ont.

AUTOMOBILE PARTS
*Dominion Forge & Stamping Co., Walkerville, Ont.

AUTOMOBILE TIRES
Ames-Holden-McCready, Limited, Montreal, Que.

AWNING CORD (cotton)
Hamilton Cotton Co., Hamilton, Ont.

AXLES
Guelph Spring & Axle Co., Ltd., Guelph, Ont.

AXLES, carriage and automobile
Guelph Spring & Axle Co., Ltd., Guelph, Ont.

BABBITT METAL
Alonzo W. Spooner, Ltd., Port Hope, Ont.
Beveridge Supply Co., Limited, Montreal, Que.
*Hoyt Metal Co., Toronto, Ont.
Magnolia Metal Co. of Canada, Ltd., Montreal, Que.
*The Canada Metal Co., Toronto, Ont.
*Tallman Brass & Metal, Ltd., Hamilton, Ont.

BAGS, Cotton
The Canadian Bag Co., Limited, Montreal, Que.

BAGS, jute
The Canadian Bag Co., Limited, Montreal, Que.

BAGS, travelling
J. Eveleigh & Co., Ltd., Montreal.
Lamontague, Ltd., Montreal, Que.
*The M. Langmuir Mfg. Co., of Toronto, Ltd., Toronto, Ont.

BAND RESAWS
*Canada Machinery Corporation, Limited, Galt, Ont.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.

BAND SAWS
*E. C. Atkins & Co., Inc., Hamilton, Ont.

BANK FITTINGS
The Canadian Office & School Furniture Co., Ltd., Preston, Ont.

BANK AND OFFICE RAILINGS AND CAGES
*Canada Wire and Iron Goods Co., Hamilton, Ont.
*Dennis Wire & Iron Works Co., London, Ont.
*The Geo. B. Meadows, Toronto, Wire, Iron & Brass Works Co., Ltd., Toronto, Ont.

BARRELS, steel, and containers
*Smart-Turner Machine Co., Ltd., Hamilton, Ont.

BARS, iron
London Rolling Mill Co., Ltd., London, Ont.

BARS, steel
London Rolling Mill Co., Ltd., London, Ont.

BASEBALL GOODS
A. J. Reach Co., Brantford, Ont.

BATHS, enamelled
Amherst Foundry Co., Ltd., Amherst, N.S.

BATTERIES, dry
*The Canadian National Carbon Co., Ltd., Toronto, Ont.

BATTERIES, Flashlight
*The Canadian National Carbon Co., Ltd., Toronto, Ont.

BATTERIES, Storage
*The Canadian National Carbon Co., Ltd., Toronto, Ont.

BEARINGS, pillow block and upright
*Canadian Fairbanks-Morse Company, Ltd., Montreal, Que.

BELT HOOKS
*Torrington Company, Limited, Upper Bedford, Que.

BELTING CHAINS
*Canadian Link-Belt Company, Ltd., Toronto, Ont.

BELTING, elevator
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.

BELTING, leather
The Beardmore Belting Co., Ltd., Toronto, Ont.
*J. L. Goodhue & Co., Danville, Que.
*McArthur Beltings, Limited, Brockville, Ont.
*The D. K. McLaren Belting Co., Ltd., Montreal, Que.
*The J. C. McLaren Belting Co., Ltd., Montreal, Que.

BELTING, rubber
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
*Gutta Percha and Rubber Ltd., Toronto, Ont.

BELTING, stitched cotton duck
*Dominion Belting Co., Ltd., Hamilton, Ont.

BENT GOODS
The Crown Lumber Co., Woodstock, Ont.

BISCUITS
The Montreal Biscuit Co., Montreal, Que.

BLACK SHEETS
*A. C. Leslie & Co., Montreal, Que.

BLANKETS
Slingsby Mfg. Co., Ltd., Brantford, Ont.
J. Walshaw & Son, Ltd., Bolton, Ont,

BLANKETS, horse
Slingsby Mfg. Co., Ltd., Brantford, Ont.
J. Walshaw & Son, Ltd., Bolton, Ont.

BLASTING ACCESSORIES
Canadian Explosives, Ltd., Montreal, Que.

BLEACHING POWDER
*Canadian Salt Co., Ltd., Windsor, Ont.

BLOWERS
*The Canadian Blower & Forge Co., Ltd., Kitchener, Ont.

BOATS OF ALL KINDS
Peterboro Canoe Co., Ltd., Peterboro, Ont.

BOBBINS
Canada Spool & Bobbin Co., Ltd., Walkerton, Ont.

BOILER COMPOUND
Beveridge Supply Co., Limited, Montreal, Que.

BOILER COMPOUND AND OILS
Electric Boiler Compound Co., Ltd., Guelph, Ont.

BOILER GRAPHITE
Black Donald Graphite Company, Limited, Calabogie, Ont.

BOILER LININGS AND COVERINGS
Beveridge Supply Co., Ltd., Montreal, Que.

BOILERS
*Canadian Mead Morrison Co., Ltd., Montreal, Que.
*Goldie & McCulloch Co., Limited, Galt, Ont.
*E. Leonard & Sons, Ltd., London, Ont.
J. & R. Weir, Montreal, Que.
Taylor-Forbes Co., Ltd., Guelph
*The Waterous Engine Works Co., Ltd., Brantford, Ont.

BOILERS, hot water or steam
Warden King, Ltd., Montreal.

BOILERS, steam
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.

BOILERS, steam and brass work
*The Waterous Engine Works Co., Ltd,, Brantford, Ont.

BOLTS AND NUTS
*The Canadian Tube & Iron Co., Ltd., Montreal, Que.
*The National Acme Mfg. Co., Montreal, Que.
*The Steel Company of Canada, Ltd., Hamilton, Ont.

BOOKBINDERS
*The Brown Bros., Ltd., Toronto.

BOOKCASES
*Office Specialty Mfg. Co., Ltd,, Newmarket, Ont.

BOOKCASES, sectional (Gunn)
The George McLagan Furniture Co., Ltd., Stratford, Ont.

BOOKS, blank
*The Brown Bros., Ltd., Toronto.

BOOTS AND SHOES
Ames—Holden—McCready, Limited, Montreal, Que.
J. Leckie Co., Ltd.
The John Ritchie Co., Ltd., Quebec, Que.

BOXES, cellular and fibre board
*Hinde & Dauch Paper Co. of Canada, Limited, Toronto.
*Thompson & Norris Co., of Canada, Ltd., Toronto and Montreal.

BOXES, rattle and soap
The Arlington Co. of Canada, Ltd., Toronto, Ont,

BOXES, steel shop
*Steel Trough and Machine Co., Ltd., Tweed, Ont.

BOXES AND SHOOKS, wooden
The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.

BOXES, wooden
Barchard & Co., Ltd., Toronto.

BRAKE SHOES
*Canadian Hart Wheels, Limited, Hamilton, Ont.

BRANDS, burning
Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS AND BRONZE WIRE
*Standard Underground Cable Co of Canada, Ltd., Hamilton, Ont.

BRASS ENGRAVERS
Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS FOUNDERS AND FINISHERS
*The Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.
Sully Brass Foundry, Limited, Toronto
*Tallman Brass & Metal, Ltd., Hamilton, Ont.

*For Display Advertisement see Index, Page 41

The James Morrison Brass Mfg Co., Ltd., Toronto, Ont.
*The Kerr Engine Co., Limited, Walkerville, Ont

BRASS RODS, SHEETS AND PLATES
*Brown's Copper and Brass Rolling Mills, Ltd., New Toronto.

BRASS TUBING, seamless
Canadian Seamless Wire Co., Ltd., Toronto, Ont.

BRASS WIRE
Canadian Seamless Wire Co., Ltd., Toronto.

BRASS WORK, church
Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS WORK, special
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.

BRICK
National Brick Co. of Laprairie, Laprairie, Que.

BRICK, enamel
National Brick Co. of Laprairie, Laprairie, Que.

BRICK, pressed
National Brick Co. of Laprairie, Laprairie, Que.

BRICK, rubbing
*Canadian Hart Wheels, Limited, Hamilton, Ont.

BRICK, sewer.
National Brick Co. of Laprairie, Laprairie, Que.

BRIDGES, Railway and Highway
*Canadian Des Moines Steel Co., Limited, Chatham.
*Hamilton Bridge Works Co., Ltd., Walkerville, Ont.
*The Canadian Bridge Co., Ltd., Hamilton, Ont.
*McGregor & McIntyre, Ltd., Toronto, Ont.
*Dominion Bridge Co., Montreal.
*Mackinnon Steel Co., Ltd., Sherbrooke, Que.

BROOMS
Simms, T. S., & Co., Limited, St. John, N.B.
Stevens-Hepner Co., Limited, Port Elgin, Ont.

BRONZE SHEETS, RODS, PLATES
*Brown's Copper and Brass Rolling Mills, Ltd., New Toronto. Que.

BRUSHES
Simms, T. S., & Co., Limited, St. John, N.B.
Stevens-Hepner Co., Ltd., Port Elgin, Ont.

BRUSHES, MOTOR AND GENERATOR
Dominion Carbon Brush Co., Toronto.

BRUSHES, carbon
*Canadian National Carbon Co., Ltd., Toronto.

BUCKET TANKS
*MacKinnon Steel Co., Ltd., Sherbrooke, Que.
*The Bennett & Wright Co., Ltd., Toronto, Ont.

BUILDING FELT AND PAPER
Beveridge Supply Co., Limited, Montreal, Que.
*Eureka Mineral Wool & Asbestos Co., Toronto, Ont.
*The Barrett Co., Ltd., Toronto and Montreal

CHEMICALS
Canadian Laboratory Supplies, Ltd., Toronto, Ont.
*The Grasselli Chemical Co., Ltd., Toronto, Ont.
*The Nichols Chemical Co., Ltd Montreal, Que.

BUNGS, wooden for barrels
Wm. H. White, Ville St. Pierre, Montreal, Que.

BUCKLES, shoe and coat
Parmenter & Bulloch Co., Limited, Gananoque, Ont.

BURLAPS
The Canadian Bag Co., Limited, Montreal, Que.

BURLAPS, decorative
Dominion Oil Cloth and Linoleum Co., Limited, Montreal, Que.

CABLES, electric light, power, telephone and telegraph
*Northern Electric Company, Limited, Montreal, Que.
*Standard Underground Cable Co. of Canada, Ltd., Hamilton, Ont.

CABLES, wire
*The Dominion Wire Rope Co., Ltd., Montreal, Que.
*The B. Greening Wire Co., Ltd., Hamilton, Ont.

CALENDARS, ADVERTISING NOVELTIES, etc.
Lawson & Jones, Ltd., London.

CAMERAS
Canadian Kodak Co., Ltd., Toronto, Ont.

CAMPERS' OUTFITTERS
Slingsby Mfg. Co., Ltd., Brantford, Ont.

CANADA SILVER
*Brown's Copper and Brass Rolling Mills, Ltd., New Toronto.

CHICLETS & CHEWING GUM
Canadian Chewing Gum Company, Ltd., Toronto

CANOES
Peterboro Canoe Co., Ltd., Peterboro, Ont
The "Canadian" Canoe Co., Ltd., 216 Rink St., Peterborough, Ont.

CANS, baking powder, etc.
American Can Co., Montreal (Que.) and Hamilton (Ont.).
A. R. Whittall Can. Co., Ltd., Montreal, Que.
*MacDonald Mfg. Co., Ltd., Toronto, Ont.

CANS, fruit
American Can Co., Montreal (Que.) and Hamilton (Ont.).
A. R. Whittall Can Co., Ltd., Montreal, Que
*MacDonald Mfg. Co., Ltd., Toronto, Ont.

CANS, iron, lead and putty
A. R. Whittall Can. Co., Ltd., Montreal, Que.

CANS, tin
A. R. Whittall Can. Co, Ltd., Montreal, Que.
American Can Co., Montreal (Que.) and Hamilton (Ont.).
*MacDonald Mfg. Co., Ltd., Toronto, Ont.

CAPS, cloth
John W. Peck & Co., Ltd., Montreal, Que.

CARBIDE
*Canada Carbide Co., Ltd., Montreal, Que.

CARBONS-PROJECTOR
*Canadian National Carbon Co., Toronto, Ont.

CARBONIC ACID GAS
*Canadian Carbonate Co., Montreal.
*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.

BRASS GOODS
*The Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.

CARPETS AND RUGS
Toronto Carpet Mfg. Co., Limited, Toronto.

CARRIERS, box and barrel
*Canadian Mathews Gravity Carrier.

CARRIERS
*Richards-Wilcox Canadian Co., Ltd., London, Ont.

CARRIERS, brick
*Canadian Mathews Gravity Carrier Co., Limited, Toronto.
*Richards-Wilcox Canadian Co., Ltd., London, Ont.

CARS
*National Steel Car Co., Ltd., Hamilton, Ont.

CARS, industrial
*MacKinnon Steel Co., Ltd., Sherbrooke, Que.

CARTONS, lithographed
Consolidated Lithographing and Mfg. Co., Ltd., Montreal, Que.
Harris Lithographing Co., Ltd., Toronto, Ont.

CASTINGS, Alloy
*The Electric Steel & Metals Co., Ltd., Welland, Ont.

CASTINGS, aluminum, brass and bronze
*Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.
Fittings Limited, Oshawa, Ont.
Sully Brass Foundry, Limited, Toronto.

CASTINGS, grey iron
*Canadian Rumely Co., Ltd., Toronto, Ont.
Fittings Limited, Oshawa, Ont.
*The Goldie & McCulloch Co., Ltd. Galt, Ont.
*Wm. Kennedy & Sons, Ltd., Owen Sound, Ont.

CASTINGS, malleable iron
Fittings Limited, Oshawa, Ont.
*Galt Malleable Iron Co., Ltd., Galt, Ont.
Mapleleaf Manufacturing Comp-Smith's Falls, Ont.

CASTINGS, steel
Beauchemin & Fils, Ltd., Sorel, Que.
*Canadian Steel Founderies, Ltd., Montreal, Que.
*Dominion Foundries and Steel Co., Ltd., Hamilton, Ont.
*Electric Steel & Metals Co., Ltd., Welland, Ont.
*Wm. Kennedy & Sons, Ltd., Owen Sound, Ont.

CATALOGUE MAKERS
Grip, Ltd., Toronto, Ont.

CATALOGUE COVERS, by new lithographing process
Harris Lithographing Co., Ltd., Toronto, Ont.

CAUSTIC SODA
*Canadian Salt Co., Ltd., Windsor.

CEMENT WATERPROOFING
*Trussed Concrete Steel Company of Canada, Ltd., Walkerville, Ont.

CEMENTS, High Temp.; plastic, liquid
Beveridge Supply Co., Limited, Montreal, Que.

CENTRIFUGAL PUMPS
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

CHAIN, Detachable & Riveted
Fittings Limited, Oshawa, Ont.

CHAINS, for elevators, conveyors and drives
*Canadian Link-Belt Company, Ltd., Toronto, Ont.
Dodge Manufacturing Co. of Canada, Ltd., Toronto.

CHAIRS
*Office Specialty Mfg. Co., Ltd. Newmarket, Ont.

CHAIRS; Folding and Assembly Seating
Stratford Mfg. Co., Ltd., Stratford, Ont.

CHAIRS, rattan and upholstered
Imperial Rattan Co., Ltd., Stratford, Ont.

CHEMISTS, industrial
*Milton Hersey Co., Montreal.

CIRCULAR CUTTERS, solid steel
*Galt Knife Co., Ltd.
The Peter Hay Knife Co., Ltd., Galt, Ont.

CIRCULAR SAWS
*E. C. Atkins & Co., Inc., Hamilton, Ont.

CLAM SHELL BUCKETS
*Canadian Mead Morrison Co., Ltd., Montreal, Que.

CLOCKS, time
*International Business Machines Co., Ltd., Toronto, Ont.

CLOCKS, watchmen's
*The Bennett & Wright Co., Ltd., Toronto, Ont.

CLOSET SEATS
*Goderich Organ Co., Goderich, Ont.

CLOTHING
John W. Peck & Co., Ltd., Montreal, Que.

CLOTHING, leather and sheepskin lined coats
*A. R. Clarke & Co., Ltd., Toronto.

CLOTHING, Mackinaw
The Carss Mackinaw Clothing Co., Ltd., Orillia, Ont.

CLOTHES LINES, cotton
Hamilton Cotton Co., Hamilton, Ont.

COAL
*Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.
Standard Fuel Co., Toronto, Ont.

COBALT OXIDE
*Deloro Smelting & Refining Co. Ltd., Deloro, Ont.
The Coniagas Reduction Co., Ltd., St. Catharines, Ont.

COBALT METAL
*Deloro Smelting & Refining Co., Ltd., Deloro, Ont.

COFFEE
S. H. Ewing & Sons, Montreal.

COLD DRAWN SHAPES, flats, squares and hexagons
*The Canadian Drawn Steel Co., Ltd., Hamilton, Ont.
*Union Drawn Steel Co., Ltd., Hamilton, Ont.

COLD STORAGE DOORS
*John Hillock & Co., Ltd., Toronto

COLLAR BUTTONS
The Arlington Co. of Canada, Ltd. Toronto, Ont.

Collars

"Kantkrack" Composition
Parsons & Parsons Canadian Co., Hamilton, Ont.

COLORS
*A. Ramsay & Son Co., Montreal.

COMBS, fine dressing and name
The Arlington Co. of Canada, Ltd., Toronto

COMMERCIAL STATIONERY
*Brown Bros., Ltd., Toronto, Ont.

CONCRETE COATINGS, PAINTS, Etc.
*The Imperial Varnish & Color Co., Ltd., Toronto, Ont.

CONCRETE HARDENER AND WATERPROOFER
Beveridge Supply Co., Limited, Montreal, Que.
Sturgeons Limited, Toronto.

CONDENSERS, Barometic
*Canadian Ingersoll-Rand Co., Sherbrooke, Que.

CONDENSERS, jet and surface
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

CONDENSERS, rotary jet
*The Goldie & McCulloch Co., Ltd. Galt, Ont.

CONDUIT FOR INTERIOR WIRING
*Conduits Co., Ltd., Toronto, Ont
*National Conduit Co., Limited. Toronto.

*For Display Advertisement see Index, Page 41

CONFECTIONERY
Ganong Bros., Ltd., St. Stephens, N.B.
Moirs, Ltd., Halifax, N.S.
The Montreal Biscuit Co., Montreal, Que.

CONTAINER BOARD—strong container
*Bathurst Lumber Co., Ltd.. Bathurst, N.B.

CONTRACTOR'S PLANT
*Canadian Mead Morrison Co., Ltd., Montreal, Que.

CONVEYORS
*Canadian Link-Belt Company, Ltd., Toronto, Ont.
*Canadian Mathews Gravity Carrier Co., Toronto.
Dodge Manufacturing Co. of Canada, Ltd., Toronto.

COPPER
*Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.
*Consolidated Mining & Smelting Co. of Canada, Ltd., Montreal.

COPPER, SHEETS, PLATES, BARS, RODS
*Brown's Copper and Brass Rolling Mills, Ltd., New Toronto, Ont.
*Booth-Coulter Copper & Brass Co. Ltd., Toronto, Ont.

COPPERSMITHS
*Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.

COPPER TUBING, seamless
Canadian Seamless Wire Co., Ltd., Toronto, Ont.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.

CONDUIT-FLEXIBLE-"BRAIDUCT"
The Dalyte Electric Limited, Guelph, Ont.

COPPER WIRE
Canadian Seamless Wire Co., Ltd., Toronto, Ont.
*Standard Underground Cable Co. of Canada, Ltd., Hamilton, Ont

COPYRIGHTS
Harold C. Shipman & Co., Ottawa, Ont.

CORKS
S. H. Ewing & Sons, Montreal, Que.

CORK CARPET
Dominion Oil Cloth and Linoleum Co., Ltd., Montreal, Que.

CORRUGATED PAPER BOXES
Corrugated Paper Box Co., Ltd., Toronto, Ont.
*Hinde & Dauch Paper Co. of Canada, Limited, Toronto.
Standard Paper Box Company, Ltd., Montreal, Que.
*Thompson & Norris Co., of Canada, Ltd., Toronto and Montreal.

CORSETS
Dominion Corset Co., Quebec, Que.

COTTONS
*Montreal Cottons, Ltd., Valleyfield, P.Q.

COTTONADES
Hamilton Cotton Co., Hamilton, Ont.

COUPLERS
*Canadian Steel Foundries, Ltd., Welland, Ont.

CRANES
*Northern Crane Works, Walkerville, Ont.
*The Herbert Morris Crane and Hoist Co., Ltd., Niagara Falls, Ont.

CREAM CHEESE, Ingersoll
The Ingersoll Packing Co., Ltd., Ingersoll, Ont.

CREAM SEPARATORS AND MILK CLARIFIERS
De Laval Dairy Supply Co., Peterboro, Ont.

CREAMERY AND CHEESE FACTORY MACHINERY AND SUPPLIES
De Laval Dairy Supply Co., Ltd., Peterboro, Ont.

CREOSOTED MATERIALS
*The Barrett Co., Ltd., Toronto and Montreal.

CRUSHERS, Rock and Ore
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.

CUPOLAS
*Northern Crane Works, Ltd., Walkerville, Ont.

CUPS, presentation
Standard Silver Co., Toronto, Ont.

CURTAINS, chenille
Hamilton Cotton Co., Hamilton, Ont.

CUTLERY
Standard Silver Co., Toronto, Ont.

CUTTERS, machine
*Pratt & Whitney Co., Dundas, Ont.

DECALCOMANIA TRANSFERS
Canada Decalcomania Co., Toronto, Ont.

DENIMS
Hamilton Cotton Co., Hamilton, Ont.

DERAILS
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

DESIGNERS AND PRINTERS OF BOOKLETS, Etc.
Grip, Ltd., Toronto, Ont.

DESIGNERS OF LABOR SAVING DEVICES
Harold C. Shipman & Co., Ottawa, Ont.

DESKS
*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.
The Macey Office Equipment Co., Toronto.

DIE CASTINGS
*Tallman Brass & Metal, Limited Hamilton, Ont.

DIES
*Butterfield & Co.. Rock Island, P.Q.
*Pratt & Whitney Co., Dundas, Ont.

DIES, for metal stampings.
Larsen & Shaw, Ltd., Walkerton.

DINING ROOM SUITES
The George McLagan Furniture Co., Ltd., Stratford, Ont.

DISINFECTING APPARATUS

DOOR HANGERS
*Richards Wilcox Canadian Co., Ltd., London, Ont.

DREDGES
*Canadian Mead Morrison Co., Ltd., Montreal, Que.

DRILL PRESSES
*Canada Machinery Corporation, Ltd., Galt, Ont.

DRILL SHARPENERS
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.

DRILLS
*John Morrow Screw & Nut Co., Ltd., Ingersoll, Ont.
*Pratt & Whitney Co., Dundas, Ont.

DRIFT BOLTS OR SPIKES
London Rolling Mill Co., Ltd., London, Ont.

DROP HAMMERS
*Canada Machinery Corporation, Ltd., Galt, Ont.

DRUMS, steel, and containers
*Smart-Turner Machine Co., Ltd., Hamilton, Ont.

DRY COLORS
*The Imperial Varnish & Color Co., Ltd., Toronto.

DUMB WAITERS
Turnbull Elevator Mfg. Co., Toronto, Ont.

DURABLE WIRE ROPE
*The Dominion Wire Rope Co., Ltd., Montreal, Que.

DYNAMITE
Canadian Explosives, Ltd., Montreal, Que.

DYNAMOS
*Jones & Moore Electric Co., Ltd., Toronto, Ont.
*The Canadian Crocker-Wheeler Co., Ltd., St. Catharines, Ont.

DYNAMOS, plating
*Jones & Moore Electric Co., Ltd., Toronto, Ont.

EIDERDOWN
Galt Knitting Co., Ltd., Galt, Ont.

ELECTRICAL AND GAS FIXTURES
W. H. Banfield & Sons, Toronto.
The Garth Co., Montreal, Que.
The James Morrison Brass Mfg. Co., Ltd., Toronto, Ont.
*Tallman Brass & Metal, Ltd., Hamilton, Ont.

ELECTRIC APPLIANCES
*Canadian Crocker-Wheeler Co., Ltd., St. Catharines, Ont.
*Canadian Westinghouse Co., Ltd., Hamilton, Ont.

ELECTRIC LAMPS
The Dalyte Electric Limited, Guelph, Ont.

ELECTRICAL COMPOUNDS
Standard Paint Co. of Canada, Ltd., Montreal, Que.

ELECTRIC PLATE WARE
Rogers Bros., Ltd., Toronto, Ont.

ELECTRICAL WIRING DEVICES
W. H. Banfield & Sons, Toronto.

ELECTRODES, carbon
*Canadian National Carbon Co., Ltd., Toronto, Ont.

ELECTROTYPING
Central Press Agency, Ltd., Toronto.

ELECTRICAL SUPPLIES
*Canadian Westinghouse Co., Ltd., Hamilton, Ont.
*Jones & Moore Electric Co., Ltd.,
*Northern Electric Co., Ltd., Montreal, Que.

ELECTRO-SILVER PLATED WARE
Standard Silver Co., Toronto, Ont.

ELEVATING MACHINERY
*Canadian Link-Belt Company, Ltd., Toronto, Ont.
*Canadian Mathews Gravity Carrier Co., Toronto, Ont.
Dodge Manufacturing Co. of Canada, Ltd., Toronto.

ELEVATORS
*MacKinnon Steel Co., Ltd., Sherbrooke, Que.
Turnbull Elevator Mfg. Co., Toronto, Ont.
*The Waterous Engine Works Co., Ltd,, Brantford, Ont.
*Northern Crane Works, Ltd., Walkerville, Ont.

ELEVATORS FOR ALL PURPOSES
*The Waterous Engine Works Co., Ltd., Brantford, Ont.

ELEVATOR GATES AND DOORS
Turnbull Elevator Mfg. Co., Ltd., Toronto, Ont.
*The A. B. Ormsby Co., Ltd., Toronto, Ont.

ELEVATOR GUARDS
*The Geo. B. Meadows, Toronto.
Iron & Brass Goods Works Co., Ltd., Toronto, Ont.
*Canada Wire and Iron Goods Co., Hamilton, Ont.

EMERY GRINDERS
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

EMERY WHEELS
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

ENAMELS
Berry Brothers, Inc., Walkerville, Ont.
Dominion Paint Works, Limited, Walkerville, Ont.
*The Imperial Varnish & Color Co., Ltd., Toronto, Ont.

ENAMEL AND TIN WARE
*McClary Mfg. Co., London, Ont.

ENGINES
*E. Leonard & Sons, Limited, London, Ont.
*Goldie & McCulloch Co., Ltd., Galt, Ont.
J. & R. Weir, Montreal, Que.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.

ENGINES, gas and gasoline
*Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
*Hamilton Motor Works, Ltd., Hamilton, Ont.
*Massey-Harris Co., Ltd., Toronto.

ENGINES, gasoline, tractor, plowing and threshing
Sawyer-Massey Co., Ltd., Hamilton, Ont.

ENGINES, hoisting
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.
*Canadian Mead Morrison Co., Ltd., Montreal, Que.
*The Waterous Engine Works Co. Ltd., Brantford, Ont.

ENGINES, marine, gasoline and kerosene
Bruce, Stewart & Co., Ltd., Charlottetown, P.E.I.

ENGINES, steam plowing and threshing
Sawyer-Massey Co., Ltd., Hamilton, Ont.

ENGRAVERS, photo
Grip, Ltd., Toronto, Ont.

ENGRAVERS, half-tone
Grip, Ltd., Toronto.

ENGRAVERS AND PRINTERS steel plate
American Bank Note Co., Ottawa, Ont.

ENGRAVERS AND PRINTERS bank note
American Bank Note Co., Ottawa, Ont,

ENGRAVING
*J. L. Jones Engraving Co., Toronto, Ont.

ENGRAVING, copper and steel plate
Pritchard-Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

ENSILAGE AND STRAW CUTTERS
J. Fleury's Sons, Aurora, Ont.
*Ontario Wind Engine & Pump Co., Ltd., Toronto, Ont.

ENVELOPES
*Barber-Ellis Co., Ltd., Toronto.
Canada Envelope Co., Montreal, Que.

EXPANSION BOLTS
Beveridge Supply Co., Limited, Montreal, Que.

EXPERTS IN PATENT CAUSES
*Ridout & Maybee, Toronto, Ont.

EXPLOSIVES, high
Canadian Explosives, Ltd., Montreal, Que.

FACE PLATE JAWS
*Ker & Goodwin, Brantford, Ont.

FACTORY SUPPLIES, cheese and creamery
De Laval Dairy Supply Co., Ltd., Montreal, Que.

FANS
*The Canadian Blower & Forge Co., Ltd., Kitchener, Ont.

FENCING, wire
*C. H. Johnson & Sons, Ltd., Montreal, Que.

FELTS, pulp and paper makers
Ayers, Ltd., Lachute Mills, P.Q.

FENCES AND GATES
*Dennis Wire & Iron Works Co., London, Ont.
*Canada Wire & Iron Goods Co., Hamilton, Ont.
*Frost Steel & Wire Company, Limited, Hamilton, Ontario.

FIBRE PAILS
*The E. B. Eddy Co., Ltd., Hull, Que.

FIBRE (vulcanized), sheets, rods, tubes, etc.
*The Diamond State Fibre Co. of Canada, Ltd., Toronto.

FIBREBRICK, Plastic, jointless
Beveridge Supply Co., Limited, Montreal, Que.

FILES.
Henry Disston & Sons, Ltd., Toronto, Ont.
*John Morrow Screw & Nut Co., Ltd., Ingersoll, Ont.
*The Nicholson File Co., Port Hope
The Ingersoll File Company. Ltd. Ingersoll, Ont.

FILING CABINETS
*Office Specialty Co., Newmarket, Ont.

FILING DEVICES
The Macey Office Equipment Co., Toronto.

FILING EQUIPMENT, wood & steel
*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.

FILING SYSTEMS
*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.

FIRE ALARMS
*Northern Electric Co., Ltd., Montreal, Que.

* For Display Advertisement see Index, Page 41

FIRE BRICK
Dominion Fire Brick & Clay Products, Ltd., Moose Jaw, Sask.
FIRE BRICK AND CLAY
Dominion Fire Brick & Clay Products, Ltd., Moose Jaw, Sask.
FIRE BRICK, PLASTIC
Beveridge Supply Co., Limited, Montreal, Que.
FIRE DOOR HARDWARE
*Richard Wilcox Canadian Co., Ltd., London, Ont.
FIRE DOORS
*A. B. Ormsby Co., Ltd., Toronto.
*The Pedlar People, Ltd., Oshawa, Ont.
FIRE ENGINES
American LaFrance Fire Engine Company of Canada, Limited, Toronto.
*Waterous Engine Works Co., Ltd., Brantford, Ont.
FIRE ESCAPES
American LaFrance Fire Engine Company of Canada, Limited, Toronto.
Canadian Des Moines Steel Co., Chatham, Ont.
*Canada Wire & Iron Goods Co., Hamilton, Ont.
*Dennis Wire & Iron Works Co., London, Ont.
*McGregor & McIntyre, Ltd., Toronto, Ont.
FIRE EXTINGUISHERS
*A. B. Ormsby Co., Ltd., Toronto.
American LaFrance Fire Engine Company of Canada, Limited, Toronto.
*Booth-Coulter Copper & Brass Co. Ltd., Montreal, Que.
*The Bennett & Wright Co., Ltd. Toronto, Ont.
FIRE FIGHTING APPARATUS
American LaFrance Fire Engine Company of Canada, Limited, Toronto.
*Waterous Engine Works Co., Ltd. Brantford, Ont
FIRE HOSE
*Canadian Consolidated Rubber Co of Canada, Ltd., Montreal, Que
*Gutta Percha & Rubber, Ltd., Toronto, Ont.
FIRE PREVENTION MATERIAL
*Chicago Bridge & Iron Works Bridgeburg, Ont.
*Eureka Mineral Wool & Asbestos Co., Toronto.
*The Bennett & Wright Co., Ltd., Toronto, Ont
FIRE-PROOF WINDOWS AND DOORS
*Canadian Metal Window & Steel Products, Limited, Toronto.
*A. B. Ormsby Co., Ltd., Toronto.
*Pedlar People Ltd. Oshawa, Ont
*Trussed Concrete Steel Company of Canada, Ltd., Walkerville, Ont.
FIRE PROTECTION SYSTEMS
*Canadian Des Moines Steel Co., Limited, Chatham.
FIRE SPRINKLER SYSTEMS
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
*The Bennett & Wright Co., Ltd., Toronto, Ont.
*Purdy Mansell Co., Toronto, Ont
FIRE AND WATER DEPARTMENT
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
The Garth Co., Montreal, Que.
FISH, Atlantic Sea-Foods
Maritime Fish Corporation, Ltd., Montreal, Que.
FITTINGS, Pipe
Fittings Limited, Oshawa, Ont.
FITTINGS FOR SOIL PIPE
Anthes Foundry, Ltd., Toronto.
FITTINGS, steam
Warden King Ltd., Montreal, Que
FLOORING, hardwood
Seaman Kent Co., Ltd., Meaford, Ont.
FOLDING PAPER BOXES
Standard Paper Box Company, Ltd, Montreal, Que.
FORGES
*Canadian Blower & Forge Co., Ltd., Kitchener, Ont.
FORGINGS
*Canada Foundries & Forgings Co., Welland, Ont.
*The Steel Co. of Canada, Ltd., Hamilton, Ont

FORGINGS, drop
*Dominion Forge & Stamping Co., Walkerville, Ont.
FOUNDRY EQUIPMENT
*Northern Crane Works, Ltd., Walkerville, Ont.
FOUNTAIN FRUITS AND JUICES
J. J. McLaughlin, Ltd., Toronto.
FROGS AND CROSSINGS, manganese
Canadian Ramapo Iron Works, Ltd., Niagara Falls, Ont.
FUEL
Standard Fuel Co., Toronto, Ont.
FUR GARMENTS, men's and women's
Holt, Renfrew, Ltd., Quebec.
FUR GOODS
John W. Peck & Co., Ltd., Montreal, Que.
FURNACES
*McClary Mfg. Co., London, Ont.
FURNITURE; Camp and Verandah and Novelties
The Stratford Mfg. Co., Limited, Stratford, Ont.
FURNITURE, hall
The George McLagan Furniture Co., Ltd., Stratford, Ont.
FURNITURE, office
The Canadian Office & School Furniture Co., Ltd., Preston, Ont.
FURNITURE, reed and rattan
Imperial Rattan Co., Ltd., Stratford, Ont.
FUSES
*Economy Fuse & Mfg. Co., Montreal, Que.
GALVANIZED IRON
*A. C. Leslie & Co., Montreal.
GALVANIZED SHEETS
*Dominion Sheet Metal Co., Hamilton, Ont.
*The A. B. Ormsby Co., Ltd., Toronto, Ont.
GALVANIZERS
Acme Stamping & Tool Works, Ltd., Hamilton, Ont.
Fittings Limited, Oshawa, Ont.
*Ontario Wind Engine & Pump Co., Ltd., Toronto, Ont.
*The Pedlar People, Ltd., Oshawa.
GALVANIZED CUSTOM WORK
The Goold, Shapley & Muir Co., Ltd., Brantford, Ont.
GASOLINE ENGINES
*Ontario Wind & Pump Co., Ltd. Toronto, Ont.
De Laval Dairy Supply Co., Ltd., Peterboro, Ont
*The Goold Shapley & Muir Co., Limited, Brantford, Ont.
GASOLINE FIRE ENGINES
American LaFrance Fire Engine Company of Canada, Limited, Toronto.
*Waterous Engine Works Co., Ltd., Brantford, Ont.
GASOLINE STORAGE SYSTEMS, special underground
*S. F. Bowser & Co., Toronto.
*Steel Trough & Machine Co., Ltd., Tweed, Ont.
GASOLINE
*The Imperial Oil Co., Ltd., Toronto, Ont.
GEARS, cut
*Hamilton Gear and Machine, Toronto.
GEARS (noiseless, waterproof)
*The Diamond State Fibre Co. of Canada, Ltd., Toronto.
GELATINE
Canada Gelatine Co., Ltd., Brantford, Ont.
GENERATORS
*Canadian Crocker-Wheeler Co., Ltd., St. Catharines, Ont.
*Canadian Westinghouse Co., Ltd., Hamilton, Ont.
GLASSWARE
Dominion Glass Co., Ltd., Montreal, Que.
GLASSWARE, cut
Roden Bros., Ltd., Toronto.
GLASS FOR BUILDINGS
Toronto Plate Glass Importing Co., Ltd., Toronto, Ont.
GLASS BENDERS
Toronto Plate Glass Importing Co., Ltd., Toronto, Ont.

GLASS, mirror
Toronto Plate Glass Importing Co., Ltd., Toronto, Ont.
GLOVES AND MITTS
*A. R. Clarke & Co., Ltd., Toronto.
Craig, Cowan Co., Ltd., Toronto.
GLUE
Canada Glue Co., Ltd., Brantford, Ont.
GOLD-FILLED WIRE AND PLATE
Canadian Seamless Wire Co., Toronto, Ont.
GOLD AND SILVER REFINERS
Canadian Seamless Wire Co., Toronto, Ont.
GRAIN CRUSHERS, rapid, easy
J. Fleury's Sons, Aurora, Ont.
GRAPE JUICE
J. J. McLaughlin, Ltd., Toronto.
The Welch Co., Ltd., St. Catharines, Ont.
GRAPHITE, lubricating
Black Donald Graphite Company, Limited, Calabogie, Ont.
GRATES
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
GRAVITY CARRIERS
*Canadian Mathews Gravity Carrier Co., Toronto, Ont.
GRILLES, metal
*Canada Wire & Iron Goods Co., Hamilton, Ont.
*Dennis Wire & Iron Works Co., London, Ont.
GRINDING MACHINERY
*Ford Smith Machine Co., Ltd., Hamilton, Ont.
*Norton Company of Canada, Ltd., Hamilton, Ont.
GRINDING AND POLISHING MACHINERY
*Canadian Hart Wheels, Ltd., Hamilton, Ont
GRINDING WHEELS
*Canadian Hart Wheels, Ltd., Hamilton, Ont.
*Norton Company of Canada, Ltd., Hamilton, Ont.
*The Dominion Abrasive Wheel Co., Ltd., New Toronto, Ont.
GRINDSTONES
*Richards-Wilcox Canadian Co., Ltd., London, Ont.
GUNN SECTIONAL BOOKCASES
The Geo. McLagan Furniture Co., Ltd., Stratford, Ont.
GUY ANCHORS
B. J. Coghlin Co., Ltd., Montreal.
GYPSUM PRODUCTS
De Laval Dairy Supply Co., Ltd., Peterboro, Ont.
HACK SAW BLADES AND FRAMES
*E. C. Atkins & Co., Inc., Hamilton, Ont.
HACK SAW MACHINES
*E. C. Atkins & Co., Inc., Hamilton, Ont.
HALL FURNITURE
The Geo. McLagan Furniture Co., Ltd., Stratford, Ont.
HANDLES (axe, pick, sledge hammers, etc.)
The Lachute Shuttle Co., Ltd., Lachute Mills, P.Q.
HANDLES, wood
Canada Spool & Bobbin Co., Ltd., Walkerton, Ont.
HAND SAWS
*E. C. Atkins & Co., Inc., Hamilton, Ont.
HANGERS
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
HARDWARE
*Richards-Wilcox Canadian Co., Ltd., London, Ont.
Taylor-Forbes Co., Ltd., Guelph Ont.
HARNESS
Lamontagne, Ltd., Montreal, Que.
HATS, ladies' felt and straw
Toronto Hat Mfg. Co., Toronto.
HAULAGE, wire rope
*The Dominion Wire Rope Co., Ltd., Montreal Que

HEADING SAWS
*E. C. Atkins & Co., Inc., Hamilton, Ont.
HEATERS
*Waterous Engine Works Co., Ltd., Brantford, Ont.
HEATERS, feed water
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
HEATERS, WATER FEED
*Mason Regulator & Engineering Co., Ltd., Montreal, Que.
HEATING APPLIANCES
*C. A. Dunham Co., Ltd., Toronto.
*The Canadian Blower & Forge Co., Ltd., Kitchener, Ont.
HEATING SYSTEMS
*C. A. Dunham Co., Ltd., Toronto.
HEMLOCK, union and oak sole
Breithaupt Leather Co., Ltd., Kitchener, Ont.
HESSIANS
The Canadian Bag Co., Ltd., Montreal, Que.
HINGES
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
HOISTS, electric and pneumatic
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.
*Canadian Mead Morrison Co., Ltd., Montreal, Que.
*Northern Crane Works, Ltd., Walkerville, Ont.
HOSE, fire and rubber
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
*Gutta Percha & Rubber, Ltd., Toronto, Ont.
HOUSES, factory made
Wm. H. White, Ville St. Pierre, Montreal, Que.
HYDRAULIC TURBINES
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.
ICE CREEPERS
Parmenter & Bulloch Co., Ltd., Gananoque, Ont.
ICE MACHINE EQUIPMENT
Canadian Ice Machine Co., Limited, Toronto, Ont.
ICE-MAKING MACHINERY
The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.
INGOT METALS
*Brown's Copper & Brass Rolling Mills, Ltd., New Toronto, Ont.
INSERTED TOOTH SAWS
*E. C. Atkins & Co., Inc., Hamilton, Ont.
INSULATING COMPOUNDS
*The Imperial Varnish & Color Co., Ltd., Toronto.
INSULATION VULCANIZED FIBRE
*The Diamond State Fibre Co. of Canada, Ltd., Toronto.
INTERLOCKING RUBBER TILING
*Gutta Percha & Rubber Mfg. Co., of Toronto, Ltd., Toronto, Ont.
IRON
*Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.
IRON AND STEEL BARS
*Burlington Steel Co., Ltd., Hamilton, Ont.
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
IRON STAIRWAYS
*Canada Wire & Iron Goods Co., Hamilton, Ont.
*Dennis Wire & Iron Works Co., London, Ont.
*McGregor & McIntyre, Ltd., Toronto, Ont.
IRONWORK, architectural
*Canada Wire & Iron Goods Co., Hamilton, Ont.
IRONWORK, ornamental
*Canada Wire & Iron Goods Co., Hamilton, Ont
INDUSTRIAL DESIGN PATENTS
Harold C. Shipman & Co., Ottawa, Ont.
JAM, canned goods, etc.
E. D Smith & Son, Ltd.
JAPANS, enamels, etc.
Berry Brothers, Inc., Walkerville, Ont.
A. Muirhead Co., Ltd., Toronto
*The Imperial Varnish & Color Co., Ltd., Toronto, Ont.

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JELLY POWDER
S. H. Ewing & Sons, Montreal.
JEWELRY, enamelled souvenir
*Caron Bros., Montreal, Que.
JEWELRY, gold-filled
*Caron Bros., Montreal, Que.
JOINTERS
*Canada Machinery Corporation, Ltd., Galt, Ont.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.
JOIST HANGERS
*Richards-Wilcox Canadian Co., Ltd., London, Ont.
JUNCTION BOXES, cable
*Standard Underground Cable Co. of Canada, Ltd., Hamilton, Ont.
KINDLING
Standard Fuel Co., Toronto, Ont.
KNIFE GRINDERS
*Canada Machinery Corporation, Ltd., Galt, Ont.
KNITTED GOODS
*Penman's, Ltd., Paris, Ont.
KNIVES
*Galt Knife Co., Ltd.
The Peter Hay Knife Co., Ltd., Galt, Ont.
Simonds Canada Saw Co., Ltd., Montreal, Que.
KNIVES, pulp and paper
Henry Disston & Sons, Toronto.
The Peter Hay Knife Co., Ltd., Galt, Ont.
KODAKS AND PHOTOGRAPHIC SUPPLIES
Canadian Kodak Co., Ltd., Toronto.
LABELS
Lawson & Jones, Ltd., London, Ont.
LABELS, lithographed
Consolidated Lithographing and Mfg. Co., Ltd., Montreal, Que.
Harris Lithographing Co., Ltd., Toronto, Ont.
LABORATORY SUPPLIES
Canadian Laboratory Supplies, Ltd., Toronto.
LACE LEATHER
F. C. McCordick, St. Catharines, Ont.
*The D. K. McLaren Belting Co., Ltd., Montreal, Que.
*The J. C. McLaren Belting Co., Ltd., Montreal, Que.
LADDERS
Stratford Mfg. Co., Ltd., Stratford, Ont.
LADLES, foundry
*Northern Crane Works, Ltd., Walkerville, Ont.
LAMPS, Gasoline, Vapor.
Coleman Lamp Company, Ltd., Toronto.
LATH
The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.
LATHE CHUCKS
*Ker & Goodwin, Brantford, Ont.
LATHES
*Canada Machinery Corporation, Ltd., Galt, Ont.
LAUNCHES
Peterboro Canoe Co., Ltd., Peterboro, Ont.
LAWN MOWERS
Taylor-Forbes Co., Ltd., Guelph, Ont.
LAWN SWINGS
Stratford Mfg. Co., Ltd., Stratford, Ont.
LAVATORIES, enameled
Amherst Foundry Co., Ltd., Amherst, N.S.
LAMPS (ELECTRIC)
The Dalyte Electric Limited, Guelph, Ont.
LAUNDRY SINKS
Amherst Foundry Co., Ltd., Amherst, N.S.
LEAD
*Consolidated Mining & Smelting Co. of Canada, Ltd., Montreal.
LEAD GRINDERS
Benjamin Moore & Co., Ltd., Toronto, Ont.
LEAD PIPE
*Hoyt Metal Co., Toronto, Ont.
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
Toronto Plate Glass Importing Co., Ltd., Toronto, Ont.
*The Canada Metal Co., Toronto.
LEAD SHEET
Toronto Plate Glass Importing Co., Ltd., Toronto, Ont.
LEATHER
The Robson Leather Co., Ltd., Oshawa, Ont.
LEATHER, bookbinders'
Clarke & Clarke, Ltd., Toronto.
LEATHER, fancy
Clarke & Clarke, Ltd., Toronto.
LEATHER GOODS
Lamontagne, Ltd., Montreal, Que
LEATHER GOODS, Fine
Federated Leather Goods Co., Ltd., Montreal, Que.
Canadian Leather Products, Ltd., Toronto, Ont.
LEATHER, hemlock, union and oak sole
The Breithaupt Leather Co., Ltd., Kitchener, Ont.
LEATHER, patent colt and side leather
*A. R. Clarke & Co., Ltd., Toronto.
LEATHER, sheep skin, etc.
Clarke & Clarke, Ltd., Toronto.
LEATHER, upholstering
Clarke & Clarke, Ltd., Toronto.
LEATHER, upper
A. Davis & Son., Ltd., Kingston, Ont.
King Brothers Co., Ltd., Whitby, Ont.
LINK-BELT, Ewart and saw mill riveted
*Canadian Link-Belt Co., Toronto.
LINOLEUM
Dominion Oil Cloth and Linoleum Co., Ltd., Montreal, Que.
LITHOGRAPHERS
American Bank Note Co., Ottawa, Ont.
Consolidated Lithographing and Mfg. Co., Ltd., Montreal, Que.
Harris Lithographing Co., Ltd., Toronto, Ont.
The Federated Press, Limited, Montreal, Que.
LOCKERS
*Canada Wire & Iron Goods Co., Hamilton, Ont.
*Dennis Wire & Iron Works Co., London, Ont.
*Geo. B. Meadows, Wire, Iron and Brass Works Co., Toronto, Ont.
LOCOMOTIVES, industrial
*Montreal Locomotive Works, Ltd., Montreal, Que.
LOCOMOTIVE & MARINE BRASS WORKS
The James Morrison Brass Mfg. Co., Ltd., Toronto.
LOOSE LEAF SYSTEMS
Copeland-Chatterson Co., Ltd., Brampton, Ont.
LUBRICATING FLAKE GRAPHITE
Black Donald Graphite Company, Limited, Calabogie, Ont.
LUGS, for silos and water tanks
*Ontario Wind Engine & Pump Co., Ltd., Toronto.
LUMBER
The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.
LUMBER, asbestos
*Eureka Mineral Wool & Asbestos Co., Toronto, Ont.
LUMBER, spruce and pine, cedar railway ties and shingles
*Bathurst Lumber Co., Ltd., Bathurst, N.B.
LUMBER, red pine and spruce
Gillies Bros., Ltd., Braeside, Ont.
LUMBER, White pine
Gillies Bros., Ltd., Braeside, Ont.
LUMBERING BLANKETS
Slingsby Mfg. Co., Ltd., Brantford, Ont.
MACHINE DESIGNING.
Harold C. Shipman & Co., Ottawa, Ont.
MACHINE KNIVES
*Galt Knife Co., Ltd.
*E. C. Atkins & Co., Inc., Hamilton, Ont.
Henry Disston & Sons, Toronto.
MACHINE TOOLS
*Canada Machinery Corporation, Ltd., Galt, Ont.
*John Bertram & Sons Co., Ltd., Dundas, Ont.
MACHINE WORK, special and repairs
*Canadian Rumely Co., Ltd., Toronto, Ont.
MACHINERY, special, designing and developing.
Larsen & Shaw, Ltd., Walkerton.
BAKERS
Fletcher Mfg. Co., Ltd., Toronto.
MACHINERY AND UTENSILS FOR CANDY
Fletcher Mfg. Co., Ltd., Toronto.
MACHINERY AND UTENSILS FOR ICE CREAM
Fletcher Mfg. Co., Ltd., Toronto.
MACHINERY, Conveying
*Canadian Link-Belt Company, Ltd., Toronto, Ont.
*Canadian Mathews Gravity Carrier Co., Ltd., Toronto.
MACHINERY, flour mill
*Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
MACHINERY, ice cream
J. J. McLaughlin, Ltd., Toronto.
MACHINERY, grinding
*Canadian Hart Wheels, Ltd., Hamilton, Ont.
*Canadian Mead Morrison Co., Ltd., Montreal, Que.
J. & R. Weir, Montreal, Que.
*Northern Crane Works, Ltd., Walkerville, Ont.
MACHINERY, iron working
*Canada Machinery Corporation, Ltd., Galt, Ont.
*John Bertram & Sons Co., Ltd., Dundas, Ont.
MACHINERY, pulp mill
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.
*Dominion Engineering Works, Limited, Montreal, Que.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.
MACHINERY, punching and shearing
*Canada Machinery Corporation, Ltd., Galt, Ont.
*John Bertram & Sons Co., Ltd., Dundas, Ont.
MACHINERY, railroad and car-shop
*Canada Machinery Corporation, Ltd., Galt, Ont.
*John Bertram & Sons Co., Ltd., Dundas, Ont.
MACHINERY, roadmaking
Sawyer-Massey Co., Ltd., Hamilton, Ont.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.
MACHINERY, sawmill
The E. Long Mfg. Co., Ltd., Orillia, Ont.
P. Payette & Co., Pentanguishene, Ont.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.
*Yates, P. B., Machine Co., Ltd., Hamilton, Ont.
MACHINERY, sheet metal working
*Canada Machinery Corporation, Ltd., Galt, Ont.
MACHINERY, woodworking
*Canada Machinery Corporation, Ltd., Galt, Ont.
*Yates, P. B., Machine Co., Ltd., Hamilton, Ont.
Preston Woodworking Machinery Co., Ltd., Preston, Ont.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.
MAGNESITE
*Canadian Carbonate Co., Montreal, Que.
MALLEABLE IRON CASTINGS
Malleable Castings Co., Ltd., Smith's Falls, Ont.
*Galt Malleable Iron Co., Ltd., Galt, Ont.
MARTINGALE RINGS AND SLIDE LOOPS
The Arlington Co. of Canada, Ltd., Toronto, Ont.
MATCHERS
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.
MATCHES
*The E. B. Eddy Co., Ltd., Hull, Que.
MECHANICAL STOKERS
*Under-feed Stoker Co. of Canada, Ltd., Toronto.
METAL, babbitt
Alonzo W. Spooner, Ltd., Port Hope, Ont.
*Canada Metal Co., Toronto, Ont.
METAL CEILINGS
*The Pedlar People, Ltd., Oshawa.
MACHINERY AND UTENSILS FOR
Ont.
*The A. B. Ormsby Co., Ltd., Toronto, Ont.
METAL LATH
*The Pedlar People, Ltd., Oshawa, Ont.
METAL LATH
*Trussed Concrete Steel Company of Canada, Ltd., Walkerville, Ont.
METAL PACKING
*Garlock Packing Co., Hamilton, Ont.
METAL, spinning and stamping
*The Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.
METAL PROTECTIVE PAINTS
Sturgeons Limited, Toronto.
METAL SAWS
*E. C. Atkins & Co., Inc., Hamilton, Ont.
METAL SHINGLES
*The Pedlar People, Ltd., Oshawa, Ont.
*The A. B. Ormsby Co., Ltd., Toronto, Ont
METAL STAMPING
W. H. Banfield & Sons, Toronto.
MILK DEALERS' MACHINERY AND SUPPLIES
De Laval Dairy Supply Co., Ltd., Peterboro, Ont.
MILLBOARD, asbestos
*Eureka Mineral Wool & Asbestos Co., Toronto.
MILLING CUTTERS
*Pratt & Whitney Co. of Canada, Dundas, Ont.
MILLING MACHINES
*Ford Smith Machine Co., Ltd., Hamilton, Ont.
MILL RIVITED
*Canadian Link-Belt Company, Ltd., Toronto, Ont.
MITTS AND GLOVES, Indian, tan, red deerskins
Holt, Renfrew, Ltd., Quebec, Que.
*A. R. Clarke & Co., Ltd., Toronto.
MIXERS, chocolate, dough and paint
Fletcher Mfg. Co., Ltd., Toronto.
MOCCASINS AND SLIPPERS, Indian tanned leathers
Holt, Renfrew, Ltd., Quebec, Que.
MONEL METAL
*International Nickel Co. of Canada, Ltd., Toronto.
MORTISERS
*Canada Machinery Corporation, Ltd., Galt, Ont.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.
MOTION PICTURES
Pathescope of Canada, Limited, Toronto.
Filmcraft Industries, Limited, Toronto, Ont.
MOTOR CARS
*Ford Co. of Canada, Ford, Ont.
MOTORS, electric (alternating current)
*Canadian Westinghouse Co., Ltd., Hamilton, Ont.
*Jones & Moore Electric Co., Ltd., Toronto, Ont.
*Canadian Crocker-Wheeler Co., Ltd., St. Catharines, Ont.
*T. & H. Electric Co., Hamilton, Ont.
MOTORS, electric (direct current)
*Canadian Westinghouse Co., Ltd., Hamilton, Ont.
*Jones & Moore Electric Co., Ltd., Toronto, Ont.
*T. & H. Electric Co., Hamilton.
MOTORS, electric (repairing)
*T. & H. Electric Co., Hamilton
MOTOR TRUCKS
Maple Leaf Manufacturing Company, Ltd., Montreal Que.
MOULDERS
*Canada Machinery Corporation, Ltd., Galt, Ont.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.
NAILS
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
NAILS, copper
Parmenter & Bullock Co., Ltd., Gananoque, Ont.
NAILS, wire
Parmenter & Bullock Co., Ltd., Gananoque, Ont.

* For Display Advertisement see Index, Page 41

NAPHTHA
*The Imperial Oil Co., Ltd., Toronto, Ont.
NICKEL CASTINGS
*International Nickel Co. of Canada, Ltd., Toronto.
NICKEL METAL
*Deloro Smelting & Refining Co., Ltd., Deloro, Ont.
*International Nickel Co. of Canada, Ltd., Toronto.
NICKEL OXIDE
*Deloro Smelting & Refining Co., Ltd., Deloro, Ont.
Coniagas Reduction Co., Ltd., St Catharines, Ont.
*International Nickel Co. of Canada, Ltd., Toronto.
NUTS
*John Morrow Screw & Nut Co., Ltd., Ingersoll, Ont.
*The National Acme Mfg. Co., Montreal, Que.
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
OAKUM, plumbers, Canadian Navy
Factory Waste & Metal Co., Montreal, Que.
OAT CRUSHERS AND FLAKERS
J. Fleury's Sons, Aurora, Ont.
OFFICE CHAIRS, Etc.
The Macey Office Equipment Co., Toronto.
OFFICE DESKS
*Goderich Organ Co., Goderich, Ont
OFFICE EQUIPMENT
*Office Specialty Co., Newmarket, Ont.
OFFICE FURNITURE
*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.
OILS
*A. Ramsay & Son Co., Montreal Que.
OIL FILTRATION AND CIRCULATING SYSTEMS
*S. F. Bowser & Co., Toronto, Ont.
OIL STORAGE SYSTEMS, self-measuring
*S. F. Bowser & Co., Toronto, Ont
OIL COMPANIES
*Canadian Oil Cos., Toronto.
Commercial Oil Co., Ltd., Hamilton, Ont.
*Imperial Oil Co., Toronto.
OILS (petroleum products)
*British American Oil Co., Ltd., Toronto, Ont.
*The Imperial Oil Co., Toronto.
OILS, road
*The Barrett Co., Ltd., Toronto and Montreal.
OILCLOTHS, floor and table
Dominion Oil Cloth and Linoleum Co., Ltd., Montreal, Que.
ORGANS
Casavant Freres, Limitee, St. Hyacinthe, Que.
*Goderich Organ Co., Goderich, Ont.
ORGANS, parlor
*Goderich Organ Co., Goderich, Ont
ORGANS, pipe
Casavant Freres, Limitee, St. Hyacinthe, Que.
ORGANS, reed
Bell Piano & Organ Co., Ltd., Guelph, Ont.
ORNAMENTAL IRON WORK
*Canada Wire & Iron Goods Co., Hamilton, Ont.
*Dennis Wire & Iron Works Co., London, Ont.
*The Geo. B. Meadows, Toronto Iron & Brass Goods Works Co., Ltd., Toronto, Ont.
*McGregor & McIntyre, Ltd., Toronto, Ont.
OVERALLS
Peerless Overall Co., Rock Island, Que.
Walker Pant & Shirt Co., Walkerville and Chatham, Ont.
OVERCOATINGS
Rosamond Woollen Co., Almonte, Ont.
OVERHEAD RUNWAYS
*MacKinnon Steel Co., Ltd., Sherbrooke, Que.
*Richards-Wilcox Canadian Co Ltd., London, Ont.

OXY-ACETYLENE WELDING
*L'Air Liquide Society, Montreal, Que.
*The Prest-O-Lite Co., Inc., Toronto
OXYGEN
Dominion Oxygen Co., Ltd., Toronto.
*L'Air Liquide Society, Montreal Que.
PACKING BOXES
Barchard & Co., Ltd., Toronto.
PACKING, engine
*Garlock Packing Co., Hamilton, Ont.
PACKING, Metallic-Flexible
Beveridge Supply Co., Ltd., Montreal, Que.
PACKING, rubber
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
*Gutta Percha & Rubber Mfg. Co. of Toronto, Ltd.
*Jenkins Bros., Ltd., Montreal, Que.
PAD HOOKS
Parmenter & Bulloch Co., Ltd., Gananoque, Ont.
PAILS AND TUBS, wooden
The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.
PAINTERS' SUPPLIES
A. Muirhead Co., Ltd., Toronto.
PAINTING MACHINES
Spramotor Company, London, Ont.
PAINTS AND VARNISHES
Berry Brothers, Inc., Walkerville, Ont.
A. Muirhead Co., Ltd., Toronto.
Benjamin Moore & Co., Ltd., Toronto, Ont.
Dominion Paint Works, Limited, Walkerville, Ont.
*The Imperial Varnish & Color Co., Ltd., Toronto, Ont.
The Staneland Co., Ltd., Victoria, B.C.
*A Ramsay & Sons Co., Montreal, Que.
Standard Paint Co. of Canada, Ltd., Montreal, Que.
PAINTS, preservative
Dominion Paint Works, Limited, Walkerville, Ont.
Standard Paint Co. of Canada, Ltd., Montreal, Que.
*The Barrett Co., Ltd., Toronto and Montreal.
PAPER BOARDS & BAGS
Beveridge Supply Co., Ltd., Montreal, Que.
PAPER BOXES
Standard Paper Box Company, Ltd., Montreal, Que.
King Paper Box Co., Ltd., Montreal, Que.
PAPER, coated, book and label
*Provincial Paper Mills, Ltd., Georgetown, Ont.
PAPER, coated box board
*Provincial Paper Mills, Ltd., Georgetown, Ont.
PAPER, coated cover
*Provincial Paper Mills, Ltd., Georgetown, Ont.
PAPER, envelope
*Provincial Paper Mills, Ltd., Georgetown, Ont.
The Toronto Paper Mfg. Co., Cornwall, Ont.
PAPER, enamelled blotting
*Provincial Paper Mills, Ltd., Georgetown, Ont.
PAPER, label
*Provincial Paper Mills, Ltd., Georgetown, Ont.
PAPER, ledger
*Howard Smith Paper Mills, Ltd., Montreal, Que.
*Rolland Paper Co., Ltd., Montreal, Que.
The Toronto Paper Mfg. Co., Cornwall, Ont.
PAPER, super-book
The Toronto Paper Mfg. Co., Cornwall, Ont.
PAPER, writing
The Toronto Paper Mfg. Co., Cornwall, Ont.
*Howard Smith Paper Mills, Ltd., Montreal, Que.
*Rolland Paper Co., Ltd., Montreal, Que.
PAPERS, bond
*Howard Smith Paper Mills, Ltd., Montreal, Que.
*Rolland Paper Co., Ltd., Montreal, Que.

PAPERS, building
*Bathurst Lumber Co., Ltd., Bathurst, N.B.
*The Riordon Pulp & Paper Co., Montreal, Que.
Standard Paint Co. of Canada, Ltd., Montreal, Que.
PARLOR SUNDRIES
The Geo. McLagan Furniture Co., Ltd., Stratford, Ont.
PATENTS
Fetherstonhaugh & Co., Toronto.
*Ridout & Maybee, Toronto, Ont.
*Harold C. Shipman & Co., Ottawa.
PATENT LITIGATION
*Ridout & Maybee, Toronto, Ont.
*Harold C. Shipman & Co., Ottawa, Ont.
PAVING MATERIAL
*Trussed Concrete Steel Company of Canada, Ltd., Walkerville, Ont.
PAY ROLL AUDITS
*International Business Machines, Ltd., Toronto, Ont.
PERFORATED METALS
*Canada Wire & Iron Goods Co., Hamilton, Ont.
PERFORATED MUSIC ROLLS
The Otto Higel Co., Ltd., Toronto.
PERFUMES AND TOILET PREPARATIONS
Sovereign Perfumes, Ltd., Toronto.
PETROLEUM PRODUCTS
*The Imperial Oil Co., Ltd., Toronto, Ont.
PHONOGRAPH MOTORS
W. H. Banfield & Sons, Toronto.
PHOTO MAILERS
*Thompson & Norris Co., of Canada, Ltd., Toronto and Montreal.
PIANO ACTIONS
The Otto Higel Co., Ltd., Toronto.
PIANO KEYS
The Otto Higel Co., Ltd., Toronto.
PIANO, player actions
The Otto Higel Co., Ltd., Toronto.
PIANOS AND PLAYER PIANOS
Bell Piano & Organ Co., Ltd., Guelph, Ont.
PIANO STOOLS AND BENCHES
*Goderich Organ Co., Goderich, Ont.
PIG IRON
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
*M. A. Hanna & Co., Toronto.
*Algoma Steel Corporation.
PINS, society, emblems and badges
*Caron Bros., Montreal, Que.
PIPE, cast iron, for water and gas
National Iron Works, Ltd., Toronto, Ont.
PIPE COUPLINGS
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
PIPE COVERINGS
*Eureka Mineral Wood & Asbestos Co., Toronto, Ont.
PIPES, culvert
*The Pedlar People, Ltd., Oshawa, Ont.
PIPE AND NIPPLES, black and galvanized
*Canadian Tube & Iron Co., Ltd., Montreal, Que.
PIPE, sewer
Hamilton & Toronto Sewer Pipe Co., Ltd., Hamilton, Ont.
PIPE, soil and fittings
Anthes Foundry, Ltd., Toronto and Winnipeg.
Warden King Ltd., Montreal, Que.
PISTON RODS
*The Canadian Drawn Steel Co., Ltd., Hamilton, Ont.
*Union Drawn Steel Co., Ltd., Hamilton, Ont.
PLANERS
*Canada Machinery Corporation, Ltd., Galt, Ont.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont
PLASTERING TROWELS
*E. C. Atkins & Co., Inc., Hamilton, Ont.
PLOWS
J. Fleury's Sons, Aurora, Ont.
PNEUMATIC DRILLS
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.

PLUMBERS' SUPPLIES
The Garth Co., Montreal, Que.
The James Morrison Brass Mfg. Co., Ltd., Toronto, Ont.
Toronto Plate Glass Importing Co., Ltd., Toronto, Ont.
POLE LINE MATERIAL (wooden insulator top pins, side blocks, pole steps, cross arms)
The Lachute Shuttle Co., Ltd., Lachute Mills, P.Q.
POLES, flag
*Ontario Wind Engine & Pump Co., Ltd., Toronto, Ont.
POLISHING MACHINERY
*Ford Smith Machine Co., Ltd., Hamilton, Ont.
PORK PACKERS AND CHEESE EXPORTERS
The Ingersoll Packing Co., Ltd., Ingersoll, Ont.
POWDER, blasting
Canadian Explosives, Ltd., Montreal, Que.
POWER TRANSMISSION MACHINERY
Dodge Manufacturing Co. of Canada, Ltd., Toronto.
POWER PRESSES
*Hydraulic Machinery Co., Ltd., Montreal, Que.
PRESSES, hydraulic
*The Hydraulic Machinery Co., Limited, Montreal.
PRESSES, sheet metal stamping
*Canada Machinery Corporation, Ltd., Galt, Ont.
PRESSES, veneer
*Canada Machinery Corporation, Ltd., Galt, Ont.
PRINTING AND LITHOGRAPHING
Lawson & Jones, Ltd., London, Ont.
The Federated Press, Limited, Montreal, Que.
PRINTING & LITHOGRAPHIC INKS.
Charles Bush, Limited, Toronto.
PULLEYS
*Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
PULLEYS, Fibre
*The Diamond State Fibre Co. of Canada, Ltd., Toronto.
PULLEYS, wood split
*Bernard Industrial Co., Fortierville, P.Q.
PULLEYS, Wood Split, Iron and steel.
Dodge Manufacturing Co. of Canada, Ltd., Toronto.
PULP, bleached sulphite
*Riordan Sales Co., Ltd., Montreal.
PULP, unbleached sulphite
*Riordan Sales Co., Ltd., Montreal.
PULP, sulphate and sulphite
*Bathurst Lumber Co., Ltd., Bathurst, N.B.
PULP AND PAPER MILL MACHINERY
*The Hydraulic Machinery Co., Limited, Montreal.
PUMPS
Aylmer Pump & Scale Co., Aylmer, Ont.
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.
*Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
*E. Leonard & Sons, Ltd., London, Ont.
*Ontario Wind Engine & Pump Co., Ltd., Toronto, Ont.
*Smart-Turner Machine Co., Ltd., Hamilton, Ont.
*The Electric Steel & Metals Co., Ltd., Welland, Ont.
PUMPS, boiler feed
*Smart-Turner Machine Co., Ltd., Hamilton, Ont.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
PUMPS, centrifugal
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.
*Canadian Mead Morrison Co., Ltd., Montreal, Que.
*Dominion Engineering Works, Limited, Montreal, Que.
*Dominion Forge & Stamping Co., Ltd., Walkerville, Ont.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Smart-Turner Machine Co., Ltd., Hamilton, Ont.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.

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PUMPS, hydraulic
*The Hydraulic Machinery Co., Limited, Montreal.

PUMPS, turbine and reciprocating
*Smart-Turner Machine Co., Ltd., Hamilton, Ont.

PUNCHES
*Pratt & Whitney Co., Dundas, Ont.

RADIATORS
Taylor-Forbes Co., Ltd., Guelph, Ont.
Warden King, Ltd., Montreal, Que.

RAILS (STEEL).
*Algoma Steel Corporation.

RAILINGS, brass and iron
*Dennis Wire & Iron Works Co., London, Ont.

RAILWAY SUPPLIES
*Canadian Steel Foundries, Ltd., Montreal, Que.
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
B. J. Coghlin Co., Ltd., Montreal, Que.

READY-TO-WEAR GARMENTS, ladies'
H. C. Boulter Co., Ltd., Toronto.

REAMERS
*Pratt & Whitney Co., Dundas, Ont.
*Butterfield & Co., Rock Island, P.Q.

RECEPTACLES, fibre
*The Diamond State Fibre Co. of Canada, Ltd., Toronto.

REFRIGERATORS
Sanderson-Harold Co., Ltd., Paris, Ont.

REFRIGERATING MACHINERY
The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.

REFRIGERATING EQUIPMENT.
Canadian Ice Machine Co., Ltd., Toronto, Ont.

REFRIGERATORS, store, homes and institutions
Ham & Nott Co., Ltd., Brantford, Ont.
*John Hillock & Co., Ltd., Toronto.

REINFORCEMENT BARS
*Burlington Steel Co., Ltd., Hamilton, Ont.
*The Steel Co. of Canada, Ltd., Hamilton, Ont.

REINFORCED CONCRETE
*Trussed Concrete Steel Company of Canada, Ltd., Walkerville, Ont.

REINFORCEMENT FOR CONCRETE
*Canada Wire & Iron Goods Co., Hamilton, Ont.

REINFORCEMENT FOR CONCRETE ROOFING, metal
*The Pedlar People, Ltd., Oshawa, Ont.

REVOLVING DOORS
*A. B. Ormsby Co., Ltd., Toronto.

RINGS, gold
*Caron Bros., Montreal, Que.

RIVETS
*Canadian Tube & Iron Co., Ltd., Montreal, Que.
*The Steel Co. of Canada, Ltd., Hamilton, Ont.

RIVETS, bifurcated and tubular
Parmenter & Bullock Co., Ltd., Gananoque, Ont.

RIVETS AND BURRS, iron, copper and brass
Parmenter & Bullock Co., Ltd., Gananoque, Ont.

ROCK DRILLS
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.

ROLLING STEEL DOORS
*A. B. Ormsby Co., Ltd., Toronto.

ROOFING, metal
*A. B. Ormsby Co., Ltd., Toronto.

ROOFINGS, plastic, liquid, rubber
Beveridge Supply Co., Ltd., Montreal, Que.

ROOFING, ready to lay
Standard Paint Co. of Canada, Ltd., Montreal, Que.
*The Barrett Co., Ltd., Toronto and Montreal.

ROOF TRUSSES
*The Canadian Bridge Co., Ltd., Walkerville, Ont.
*Dominion Bridge Co., Ltd., Montreal, Que.

ROPE
*Doon Twines, Limited, Kitchener, Ontario.
*Shurly & Derrett, Ltd., Toronto.

ROPE, cotton
Hamilton Cotton Co., Hamilton, Ont.

RUBBER FOOTWEAR
*Gutta Percha & Rubber Ltd., Toronto, Ont.
The Miner Rubber Co., Ltd., Grandy, Que.
Ames—Holden—McCready, Limited, Montreal, Que.

RUBBER GOODS
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
*Gutta Percha & Rubber Limited, Toronto.
Ames—Holden—McCready, Limited, Montreal, Que.

RUBBER MACHINERY
*The Hydraulic Machinery Co., Limited, Montreal.

RUBBER MACHINERY MAKERS
The Canadian Consolidated Rubber Co., Ltdd., Rubber Machinery Shops, Kitchener, Ont.

RUBBER MILL MACHINERY
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.

RUBBER PACKING
*Garlock Packing Co., Hamilton, Ont.

RULES
The Lufkin Rule Co. of Canada, Ltd., Windsor, Ont.

SADDLERY HARDWARE
*Dominion Forge & Stamping Co., Walkerville, Ont.

SAFES
*Goldie & McCulloch Co., Ltd., Galt, Ont.

SALT
*Canadian Salt Co., Ltd., Windsor, Ont.
Dominion Salt Co., Ltd., Sarnia, Ont.

SAMPLE CASES
*The M. Langmuir Mfg. Co., of Toronto, Ltd., Toronto, Ont.

SAND (For all Purposes)
Carrol Brothers, Sherkston, Ont
J. Eveleigh & Co., Ltd., Montreal, Que.

SAND RAMMERS
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.

SANITARY PAPER TOWELS
*E. B. Eddy Co., Ltd., Hull, Que.

SASH CORD, cotton
Hamilton Cotton Co., Hamilton, Ont.

SAVE-ALLS
*The Hydraulic Machinery Co., Limited, Montreal.

SAW SHARPENING MACHINERY
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

SAWS
*E. C. Atkins & Co., Ltd., Hamilton, Ont.
Henry Disston & Sons, Ltd., Toronto, Ont.
Shurly & Deitrich, Galt, Ont.

SAWS, cross-cut and band
*Canada Machinery Corporation, Ltd., Galt, Ont.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.
Shurly & Deitrich, Galt, Ont.

SAWS, circular mill
Shurly & Deitrich, Galt, Ont.

SAWS, of all kinds
Simonds Canada Saw Co., Ltd., Montreal, Que.

SAWS, rip
*Canada Machinery Corporation, Ltd., Galt, Ont.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.
Shurly & Deitrich, Galt, Ont.

SAWMILLS
*The Waterous Engine Works Co., Ltd., Brantford, Ont.

SCALES
*Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.

SCREENS
*Canada Wire & Iron Goods Co., Hamilton, Ont.

SCREEN DOORS AND WINDOWS
Sanderson-Harold Co., Ltd., Paris, Ont.
Ham & Nott Co., Ltd., Brantford, Ont.

SCREENS; Folding Draft
The Stratford Mfg. Co., Limited, Stratford, Ont.

SCREWS
*John Morrow Screw & Nut Co., Ltd., Ingersoll, Ont.
*National Acme Company, Montreal, Que.
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
*Torrington Company, Limited, Upper Bedford, Que.

SCREW PLATES
*Butterfield & Co., Rock Island, P.Q.

SEATS; Park and Grand Stand
The Stratford Mfg. Co., Limited, Stratford, Ont.

SECURITIES, engraved
American Bank Note Co., Ottawa, Ont.

SERGES
Rosamond Woollen Co., Almonte, Ont.

SEWAGE DISPOSAL SYSTEMS
Anthes Foundry, Ltd., Toronto.

SEWAGE SCREENS
*The Hydraulic Machinery Co., Limited, Montreal.

SHAFTING
*Canadian Drawn Steel Co., Ltd., Hamilton, Ont.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Union Drawn Steel Co., Ltd., Hamilton, Ont.

SHANTY BLANKETS
Slingsby Mfg. Co., Ltd., Brantford, Ont.

SHAPERS
*Canada Machinery Corporation, Ltd., Galt, Ont.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.

SHEAR BLADES, iron
*Galt Knife Co., Ltd.
The Peter Hay Knife Co., Ltd., Galt, Ont.

SHEATHING
*The Barrett Co., Ltd., Toronto and Montreal.

SHEATHING, asbestos corrugated
*Eureka Mineral Wool & Asbestos Co., Toronto, Ont.
Dodge Manufacturing Co. of Canada, Ltd., Toronto.

SHEET METAL STAMPINGS
Acme Stamping & Tool Works, Ltd., Hamilton, Ont.
*The Pedlar People, Ltd., Oshawa, Ont.
*The A. B. Ormsby Co., Ltd., Toronto, Ont.

SHEETS, fibre
*The Diamond State Fibre Co. of Canada, Ltd., Toronto.

SHEETS, galvanized
*Dominion Sheet Metal Co., Ltd., Hamilton, Ont.
*The Pedlar People, Ltd., Oshawa, Ont.

SHINGLES
*Bathurst Lumber Co., Ltd., Bathurst, N.B.

SHINGLE SAWS
*E. C. Atkins & Co., Inc., Hamilton, Ont.

SHINGLE STAINS
Sturgeons, Limited, Toronto.

SHIP BUILDERS
J. & R. Weir, Montreal, Que.

SHIRTS
John W. Peck & Co., Ltd., Montreal, Que.

SHIRTS, workmen's
*A. R. Clarke & Co., Ltd., Toronto.

SHOE PEGWOOD
O. Chalifour, Quebec, Que.

SHOE LININGS
Galt Knitting Co., Ltd., Galt, Ont.

SHOOKS
Barchard & Co., Ltd., Toronto.

SIGNAL CELLS-RAILWAY
*Canadian National Carbon Co., Ltd., Toronto.

SILENT CHAIN DRIVES
*Canadian Link-Belt Company, Ltd., Toronto, Ont.

SILVER BULLION
Coniagas Reduction Co., Ltd., St. Catharines, Ont.
*Deloro Smelting & Refining Co., Ltd., Deloro, Ont.

SILVERSMITH
Standard Silver Co., Toronto, Ont.

SILVERWARE, sterling
Roden Bros., Ltd., Toronto, Ont.

SINKS, enamelled
Amherst Foundry Co., Ltd., Amherst, N.S.

SKIFFS
Peterboro Canoe Co., Ltd., Peterboro, Ont.

SKYLIGHTS
*A. B. Ormsby Co., Ltd., Toronto.
*The Pedlar People, Ltd., Oshawa, Ont.

SLOTTERS
*Canada Machinery Corporation, Ltd., Galt, Ont.

SMOKE CONSUMERS
*Under-Feed Stoker Company of Canada, Limited, Toronto.

SMOKE-STACKS
*Canadian Chicago Bridge & Iron Co., Ltd., Bridgeburg, Ont.
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*E. Leonard & Sons, Limited, London, Ont.
*MacKinnon Steel Co., Ltd., Sherbrooke, Que.
*Steel Trough & Machine Co., Ltd., Tweed, Ont.

SOAPS
J. Barsalou & Co., Ltd., Montreal.

SODA ASH
Brunner, Mond Canada, Limited, Amherstburg, Ont.

SODA WATER FOUNTAINS
J. J. McLaughlin, Ltd., Toronto.

SODA WATER FOUNTAINS AND ACCESSORIES
Fletcher Mfg. Co., Ltd., Toronto

SOIL PIPE
Anthes Foundry, Ltd., Toronto.

SOLDER
Alonzo W. Spooner, Ltd., Port Hope, Ont.
*Canada Metal Co., Toronto, Ont.
*Hoyt Metal Co., Toronto, Ont.
Magnolia Metal Co. of Canada, Ltd., Montreal, Que.

SOLDER, silver
Geo. H. Lees & Co., Hamilton, Ont.

SOLDER, wire and bar
American Can Co., Montreal, and Hamilton.

SNOWSHOES
Holt, Renfrew, Ltd., Quebec, Que.

SPECIAL MACHINERY
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.

SPECIALTIES, SWAGED AND THREADED WIRE
*Torrington Company, Limited, Upper Bedford, Que.

SPELTER
*Consolidated Mining & Smelting Co. of Canada, Ltd., Montreal.

SPIRAL CONVEYORS
*Canadian Mathews Gravity Carrier Co., Ltd., Toronto, Ont.
Dodge Manufacturing Co. of Canada, Ltd., Toronto.

SPLIT PEAS
H. Murton, Ltd., Guelph, Ont.

SPOOLS
Canada Spool & Bobbin Co., Ltd., Walkerton, Ont.

SPORTING MEDALS AND TROPHIES
Roden Bros., Ltd., Toronto, Ont.

SPRAYERS
Spramotor Co., London, Ont.

SPRING COTTERS
*Richards-Wilcox Canadian Co., Ltd., London, Ont.

SPRINGS
*Canadian Steel Foundries, Ltd., Montreal, Que.
B. J. Coghlin Co., Ltd., Montreal.
Guelph Spring & Axle Co., Ltd., Guelph, Ont.

SPRINGS, carriage and automobile
Guelph Spring & Axle Co., Ltd.

SPRING SHACKLE BOLTS
*John Morrow Screw & Nut Co., Ltd., Ingersoll, Ont.

*For Display Advertisement see Index, Page 41

SPRINKLER SYSTEMS
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
*The Bennett & Wright Co., Ltd., Toronto, Ont.
*Purdy, Mansell, Ltd., Toronto.

SPROCKET WHEELS
*Canadian Link-Belt Company, Ltd., Dodge Manufacturing Co. of Can- Toronto, Ont.

STAINS, creosote shingle
A. Muirhead Co., Ltd., Toronto.

STAMPS, steel, brass and rubber
Pritchard-Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

STAMPINGS, steel, brass, aluminum, etc.
Larsen & Shaw, Ltd., Walkerton.

STATIONERY, office
Harris Lithographing Co., Toronto.

STEAM PIPE AND BOILER COVERINGS, asbestos
*Eureka Mineral Wool & Asbestos Co., Toronto.

STEAM SHOVELS
*Canadian Mead Morrison Co., Ltd., Montreal, Que.

STEAM SPECIALTIES
*C. A. Dunham Co., Ltd., Toronto.

STEAM TRAPS
*C. A. Dunham Co., Ltd., Toronto.

STEEL
*Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.
*Burlington Steel Co., Ltd., Hamilton, Ont.
*MacKinnon Steel Co., Ltd., Sherbrooke, Que.

STEEL BILLETS AND BLOOMS
*The Steel Co. of Canada, Ltd., Hamilton, Ont.

STEEL BUILDINGS
*The Canadian Bridge Co., Ltd., Walkerville, Ont.
*Dominion Bridge Co., Ltd., Montreal, Que.
*Hamilton Bridge Works Co., Ltd., Hamilton, Ont.
*Maritime Bridge Co., Ltd., New Glasgow, N.S.
*McGregor & McIntyre, Ltd., Toronto, Ont.
*MacKinnon Steel Co., Limited. Sherbrooke, P.Q.
*The Pedlar People, Ltd., Oshawa, Ont.
*The A. B. Ormsby Co., Ltd., Toronto, Ont.

STEEL CASTINGS
Beauchemin & Fils, Ltd., Sorel, Que.
*Canadian Steel Foundries, Ltd., Montreal, Que.
*Dominion Foundries and Steel Co., Ltd., Hamilton, Ont.
*Electric Steel & Metals Co., Ltd., Welland, Ont.

STEEL DOORS, rolling
*The A. B. Ormsby Co., Ltd., Toronto, Ont.

STEEL FILING EQUIPMENT
*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.

STEEL LATH
*Trussed Concrete Steel Company of Canada, Ltd., Walkerville, Ont.

STEEL PLATE WORK
*Canadian Chicago Bridge & Iron Co., Ltd., Bridgeburg, Ont.
The Canadian Des Moines Steel Co., Ltd., Chatham, Ont.
*Canadian Ingersoll Rand Co., Ltd. Sherbrooke, Que.
*Hamilton Bridge Works Co., Ltd Hamilton, Ont.
*MacKinnon Steel Co., Limited Sherbrooke, P.Q.
*Toronto Iron Works, Ltd., Toronto

STEEL RODS
*The Steel Co. of Canada, Ltd. Hamilton, Ont.
*Algoma Steel Corporation.

STEEL SASH
*Canadian Metal Window & Steel Products, Limited, Toronto.
*Dennis Wire & Iron Works Co., London, Ont.
*The A. B. Ormsby Co., Ltd., Toronto, Ont.
*Trussed Concrete Steel Company of Canada, Ltd., Walkerville, Ont.

STEEL SHELVING
*Dennis Wire & Iron Works Co., London, Ont.

STEEL WIRE RODS
*The Steel Co. of Canada, Ltd., Hamilton, Ont.

STELLITE
*Deloro Smelting & Refining Co., Ltd., Deloro and Toronto.

STENCILS, brass
Pritchard-Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

STEREOTYPING
Central Press Agency, Toronto.

STOKERS
*Under-feed Stoker Co. of Canada, Ltd., Toronto, Ont.

STOOLS, steel factory
*Steel Trough & Machine Co., Ltd., Tweed, Ont.

STORAGE BATTERIES
*Prest-O-Lite Company of Canada Limited, Toronto.

STORE FITTINGS
The Canadian Office & School Furniture Co., Ltd., Preston, Ont.

STOVES
Smith Foundry Co., Ltd., Fredericton, N.B.

STOVES AND RANGES
*McClary Mfg. Co., London, Ont.

STRAWS, paper drinking
Fletcher Mfg. Co., Ltd., Toronto

STRUCTURAL STEEL.
*Algoma Steel Corporation.

STRUCTURAL STEEL WORK
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.
*Dominion Bridge Co., Montreal.
*Hamilton Bridge Works Co., Ltd., Hamilton, Ont.
*McGregor & McIntyre, Ltd., Toronto, Ont.
*MacKinnon Steel Co., Ltd., Sherbrooke, Que.
*The Canadian Bridge Co., Ltd. Walkerville, Ont.

SUIT CASES
J. Eveleigh & Co., Ltd., Montreal
*The M. Langmuir Mfg. Co., of Toronto, Ltd., Toronto, Ont.

SULPHUR BURNERS
*The Hydraulic Machinery Co. Limited, Montreal.

SUPERHEATERS, steam
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

SUPERHEATERS, STEAM (Locomotive, Marine, Stationary)
The Superheater Company, Limited, Transportation Building, Montreal, Quebec.

SUPPLY DEALERS
*The Foundation Co., Ltd., Montreal, Que.

SURFACERS
*Canada Machinery Corporation Ltd., Galt, Ont.
*P. B. Yates Machine Co., Ltd. Hamilton, Ont.

SWITCHES, railway
Canadian Ramapo Iron Works Ltd., Niagara Falls, Ont.

SWITCHES AND FROGS
*Canadian Steel Foundries, Ltd. Montreal, Que.

SWITCH STANDS
Canadian Ramapo Iron Works, Ltd., Niagara Falls, Ont.

TABLE COVERS, chenille
Hamilton Cotton Co., Hamilton, Ont.

TANKS
*Canadian Chicago Bridge & Iron Company, Ltd., Bridgeburg, Ont.
*Canadian Des Moines Steel Co., Limited, Chatham.
*Hamilton Bridge Works Co., Ltd., Hamilton, Ont.
*E. Leonard & Sons, Ltd., London, Ont.
*MacKinnon Steel Co., Ltd., Sherbrooke, Que.
*Maritime Bridge Co., Ltd., New Glasgow, N.S.
*Ontario Wind Engine & Pump Co., Ltd., Toronto, Ont.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*The Goold Shapley & Muir Co., Limited, Brantford, Ont.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.
*Toronto Iron Works, Ltd., Toronto.
Wm. H. White, Ville St. Pierre, Montreal, Que.

TANKS, elevated steel
*Canadian Chicago Bridge & Iron Co., Ltd., Bridgeburg, Ont.
*Canadian Des Moines Steel Co Limited, Chatham.

TANKS, steel storage
The Canadian Des Moines Steel Co., Ltd., Chatham, Ont.
*Canadian Ingersoll Rand Co., Ltd., Sherbrooke, Que.
*Canadian Chicago Bridge & Iron Co., Ltd., Bridgeburg, Ont.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*MacKinnon Steel Co., Ltd., Sherbrooke, Que.
*Steel Trough & Machine Co., Ltd., Tweed, Ont.

TANNERS' OILS & GREASES
Salem Oil & Grease Co. of Canada, Limited, Farnham, Que.

TANNERS' SUPPLIES
*McClary Mfg. Co., London, Ont.

TAPS
*Butterfield & Co., Rock Island, P.Q.
*Pratt & Whitney Co., Dundas, Ont.

TAPES, measuring
The Lufkin Rule Co. of Canada, Ltd., Windsor, Ont.

TELEPHONE ACCESSORIES
*Northern Electric Co., Ltd., Montreal, Que.

TERMINALS, electric cable
*Standard Underground Cable Co. of Canada, Ltd., Hamilton, Ont.

TERRA COTTA, architectural
Toronto Plate Glass Importing Co., Ltd., Toronto, Ont.

TEXTILE SUPPLIES (shuttles, bobbins, spools and picker sticks)
The Lachute Shuttle Co., Ltd., Lachute Mills, P.Q.

TIE TAMPERS
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.

TILING, rubber
*Gutta Percha & Rubber Ltd., Toronto, Ont.

TIME RECORDERS
*International Business Machines Co., Ltd., Toronto, Ont.

TINWARE, lithographed
*MacDonald Mfg. Co., Ltd., Toronto, Ont.

TIRES, bicycle, auto, carriage, truck, motorcycle.
*Gutta Percha & Rubber Ltd., Toronto, Ont.

TOOLS, pneumatic
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.

TOOLS, track
B. J. Coghlin Co., Ltd., Hamilton.

TOYS AND GAMES.
A. C. Gilbert-Menzies Co., Ltd., Toronto, Ont.

TRADE MARKS AND PATENT INVESTIGATIONS
Harold C. Shipman & Co., Ottawa, Ont.

TRADE MARKS AND DESIGNS
*Ridout & Maybee, Toronto, Ont.

TRAFFIC SERVICES
Guy Tombs Limited, Montreal,, Que.

TRANSFERS, DECALCOMANIA
Canada Decalcomania Co., Ltd., Toronto.

TRANSFORMERS
*The Canadian Crocker-Wheeler Co., Ltd., St. Catharines, Ont.

TRANSLATIONS INTO FRENCH
Raoul Renault, Quebec City.

TRANSMISSION MACHINERY
*Bond Engineering Works., Limited, Toronto.
*Canadian Link Belt Co., Toronto.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.

TRAPS
*C. A. Dunham Co., Ltd., Toronto.

TROLLEYS
*Richard-Wilcox Canadian Co., Ltd., London, Ont.
*Northern Crane Works, Ltd., Walkerville, Ont.

TRUCKS
*Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
*Northern Crane Works, Ltd., Walkerville, Ont.

TRUCKS, brick, tile and lumber
*Waterous Engine Works Co., Ltd., Brantford, Ont.

TRUCKS, motor
Mapleleaf Manufacturing Comp- Ltd., Montreal, Que.
*National Steel Car Co., Ltd., Hamilton, Ont.

TRUCKS FOR OFFICE AND VAULT USE
*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.

TRUNKS
Lamontagne, Ltd., Montreal, Que.
J. Eveleigh & Co., Ltd., Montreal.
*The M. Langmuir Mfg. Co., of Toronto, Ltd., Toronto.

TUBES, ice cream
Fletcher Mfg. Co., Ltd., Toronto.

TUBING, brass and copper
*Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.
Canadian Seamless Wire Co., Toronto, Ont.
*Copper Products, Ltd., Montreal, Que.

TUBING, gold and silver
Canadian Seamless Wire Co., Toronto, Ont.

TUMBLERS, foundry
*Northern Crane Works, Ltd., Walkerville, Ont.
*Smart-Turner Machine Co., Ltd., Hamilton, Ont.

TURBINES, hydraulic
*Dominion Engineering Works, Limited, Montreal, Que.

TURBINES, steam
*The Canadian Crocker-Wheeler Co., Ltd., St. Catharines.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

TURBINE PUMPS
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

TWEEDS
Rosamond Woollen Co., Almonte, Ont.

TWINES
*Doon Twines, Limited, Kitchener, Ontario.
*Shurly & Derrett, Ltd., Toronto.

TWINES, binder
Brantford Cordage Co., Ltd., Brantford, Ont.

TWINES, cotton
Hamilton Cotton Co., Hamilton, Ont.

TWIST DRILLS
*John Morrow Screw & Nut Co., Ltd., Ingersoll.
*Pratt & Whitney Co. of Canada, Dundas Ont.

UNDERWEAR
Galt Knitting Co., Ltd., Galt, Ont.

UNIONS
*Dart Union Co., Ltd., Toronto.

UPHOLSTERED FURNITURE, leather and tapestries
Imperial Rattan Co., Ltd.

*For Display Advertisement see Index, Page 41

VACUUM PUMPS
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

VALVES
*Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
*Kerr Engine Co., Ltd., Walkerville.
*Jenkins Bros., Ltd., Montreal, Que.

VALVES, for steam and water
*Jenkins Bros., Ltd., Montreal.
James Morrison Brass Mfg. Co., Ltd., Toronto, Ont.

VALVES, REDUCING
*Mason Regulator & Engineering Co., Ltd., Montreal, Que.

VARNISH
Berry Brothers, Inc., Walkerville, Ont.

VAULT FITTINGS, steel
*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.

VAULTS AND VAULT DOORS
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

VENTILATORS
*A. B. Ormsby, Ltd., Toronto, Ont.
*The Pedlar People, Ltd., Oshawa, Ont.

WALLPAPERS
Staunton Limited, Toronto.

WALLBOARD, SHEATHING,
Beveridge Supply Co., Limited, Montreal, Que.

WASHERS
*The Steel Co. of Canada, Ltd., Hamilton, Ont.

WASHERS, fibre
*The Diamond State Fibre Co. of Canada, Ltd., Toronto.

WASHERS, plate or wrought
London Rolling Mill Co., Ltd., London, Ont.

WASTE BASKETS, fibre
*The Diamond State Fibre Co. of Canada, Ltd., Toronto.

WASTES, wool and cotton
Factory Waste & Metal Co., Montreal, Que.

WATERPROOF, cement coating
Benjamin Moore & Co., Ltd., Toronto, Ont.
Beveridge Supply Co., Ltd., Montreal, Que.
*The Barrett Co., Ltd., Toronto and Montreal.

WATERPROOF, caselining
Beveridge Supply Co., Limited, Montreal, Que.

WATER PAINTS
Sturgeons Limited, Toronto.

WEBBING, elastic
Hamilton Cotton Co., Hamilton, Ont.

WEBBING, non-elastic
Hamilton Cotton Co., Hamilton, Ont.

WELDING APPARATUS AND MATERIALS
*The Presto-O-Lite Co., Toronto.

WELL-DIGGING TOOLS AND MACHINERY
*Ontario Wind Engine & Pump Co., Ltd., Toronto, Ont.

WHEELS, corundum and emery
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

WELL DRILLING TOOLS AND MACHINERY
Oil Well Supply Co., Ltd., Petrolia, Ont.

WHIPS AND LASHES
Lay Whip Co., Rock Island, Que.

WHITE ARSENIC
Coniagas Reduction Co., Ltd., St. Catharines, Ont.

WHITE LEAD
*A. Ramsay & Son Co., Montreal.

WHITEWASHING MACHINES
Spramotor Company, London, Ont.

WINDMILLS
*Ontario Wind Engine & Pump Co., Ltd., Toronto, Ont.

WINDOW SASH
*Trussed Concrete Steel Company of Canada, Ltd., Walkerville, Ont.

WIRE
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
*Laidlaw Bale-Tie Co., Ltd., Hamilton, Ont.
*Frost Steel & Wire Company, Limited, Hamilton, Ontario.

WIRE BALE TIES
*Frost Steel & Wire Co., Limited, Hamilton, Ontario.
*Laidlaw Bale-Tie Co., Ltd., Hamilton, Ont.

WIRE CLOTH
*Canada Wire & Iron Goods Co., Hamilton, Ont.
*B. Greening Wire Co., Limited, Hamilton, Ont.
*C. H. Johnston & Sons, Ltd., Montreal, Que.

WIRE, feeder and trolley
*Standard Underground Cable Co of Canada, Ltd., Hamilton, Ont.

WIRE GUARDS
*Canada Wire & Iron Goods Co., Hamilton, Ont.
*B. Greening Wire Co., Limited, Hamilton, Ont.
*C. H. Johnson & Sons, Limited, Montreal, Que.

WIRE, insulated electric
*Standard Underground Cable Co of Canada, Ltd., Hamilton, Ont

WIRE ROPE
Canada Wire & Iron Goods Co., Hamilton.
*Dominion Wire Rope Co., Ltd., Montreal, Que.
*The B. Greening Wire Co., Ltd., Hamilton, Ont.

WIRE, weatherproof
*Standard Underground Cable Co of Canada, Ltd., Hamilton, Ont

WIRE WORK
*C. H. Johnson & Sons, Limited, Montreal, Que.
*Canada Wire & Iron Goods Co., Hamilton, Ont.
*The Geo. B. Meadows, Toronto Iron & Brass Goods Works Co., Ltd., Toronto, Ont.

WOOD
Standard Fuel Co., Toronto, Ont.

WOOD BORERS
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.
*Canada Machinery Corporation, Ltd., Galt, Ont.

WOOD PRESERVATIVES
Sturgeons Limited, Toronto.

WOOD PRINTERS
Barchard & Co., Ltd., Toronto.

WOOD PULP, mechanical
La Cie de Pulpe de Chicoutimi, Chicoutimi, Que.

WOOD SHOP, general work
*Canadian Rumely Co., Ltd., Toronto, Ont.

WOOD SPLIT PULLEYS
*Dodge Mfg. Co., Ltd., Toronto.

WOOL
*H. V. Andrews, Toronto, Ont.

WOOD TURNING
Canada Spool & Bobbin Co., Ltd., Walkerton, Ont.

WORSTED COATINGS AND SUITINGS
Rosamond Woollen Co., Almonte, Ont.

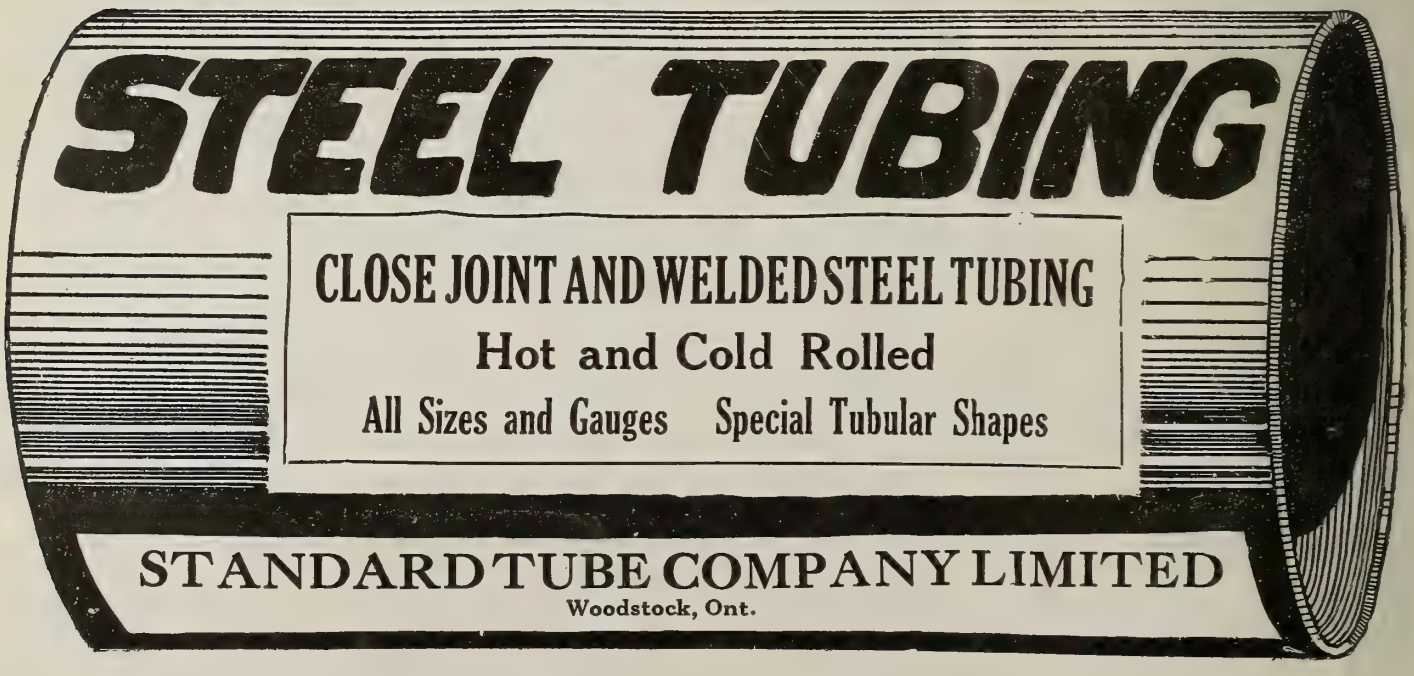
WRAPPERS, book, bottle, etc.
*Thompson & Norris Co., of Canada, Ltd., Toronto and Montreal.

WROUGHT IRON PIPE
*The Steel Co. of Canada, Ltd., Hamilton, Ont.

YARNS, cotton
Hamilton Cotton Co., Hamilton, Ont.

ZINC
*Consolidated Mining and Smelting Co., of Canada, Ltd., Montreal, Que.

ZINC, electrical
*The Canada Metal Co., Toronto.



Industrial Canada

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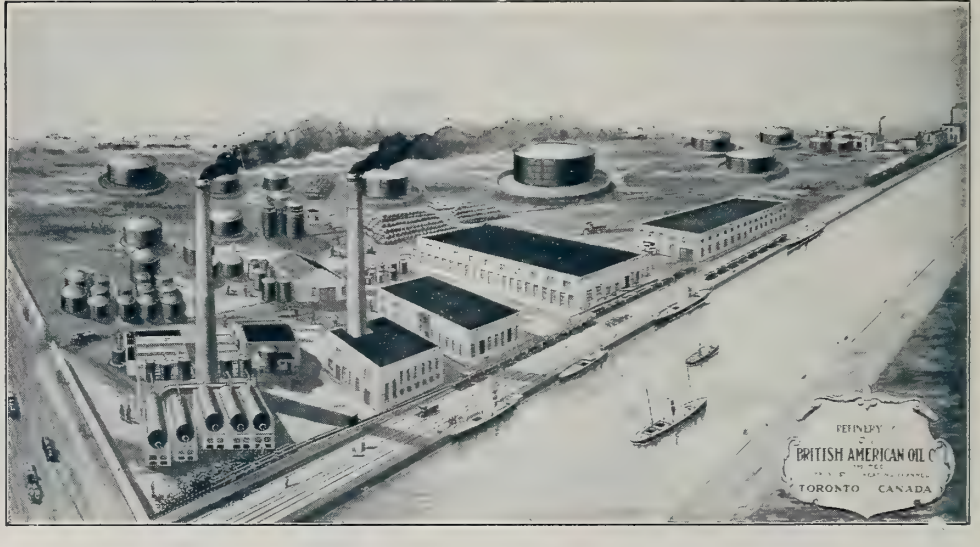
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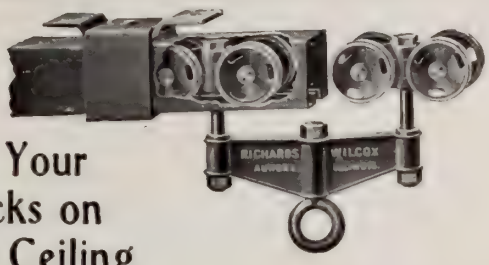
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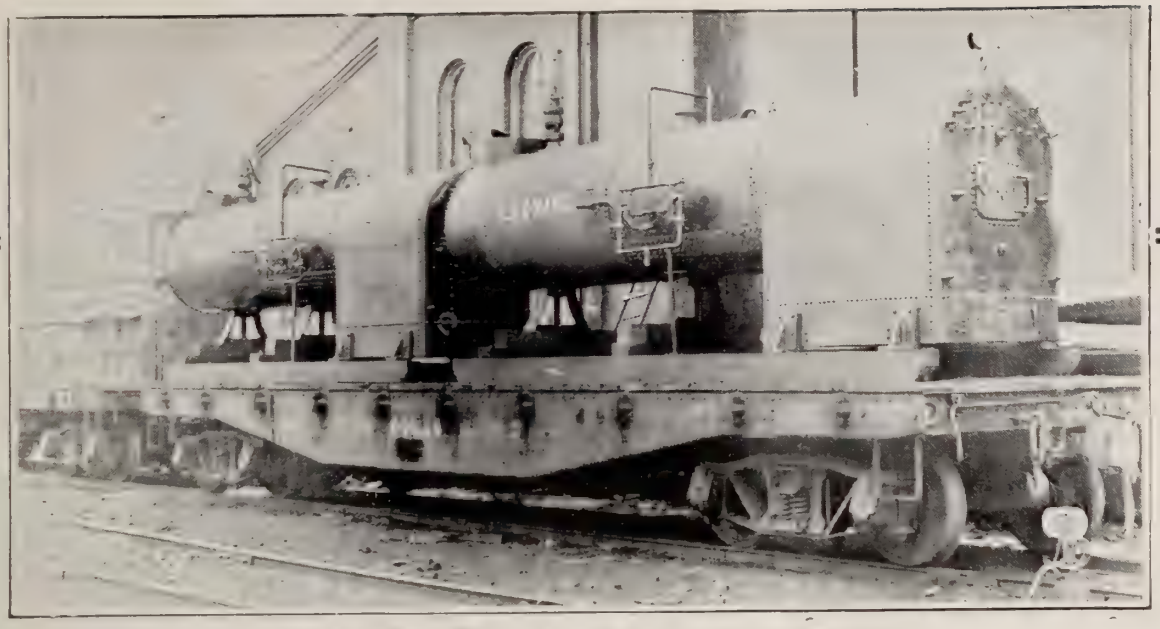
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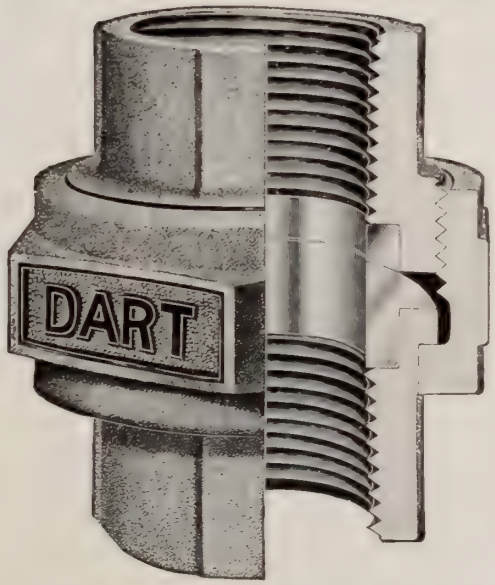
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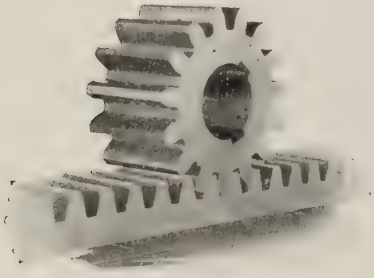
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3½	0.898	1¾	1.795
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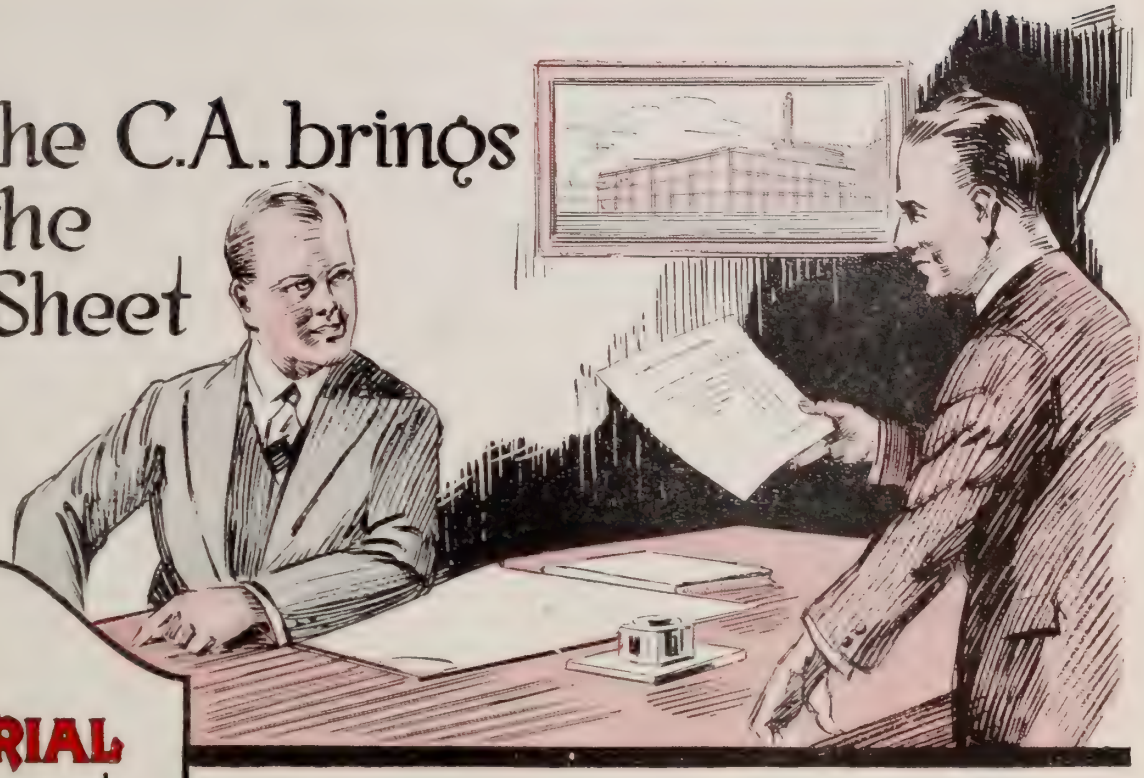
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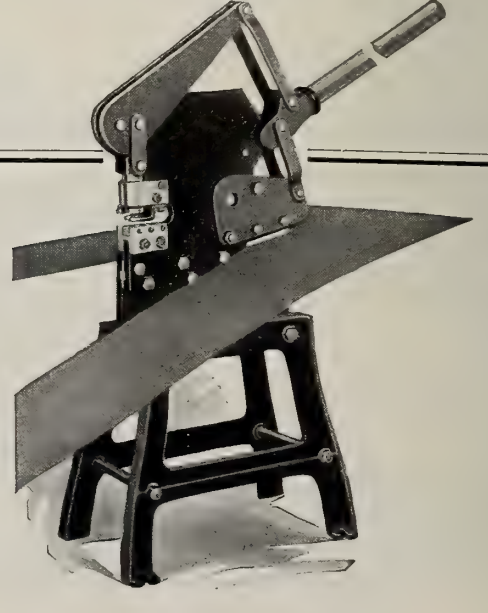
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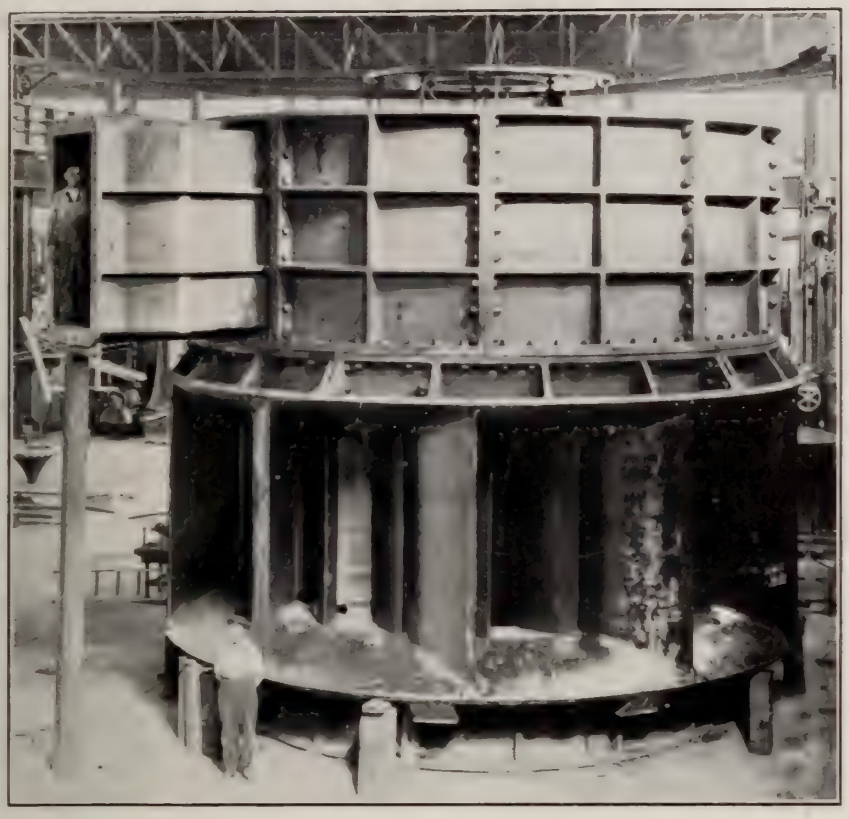
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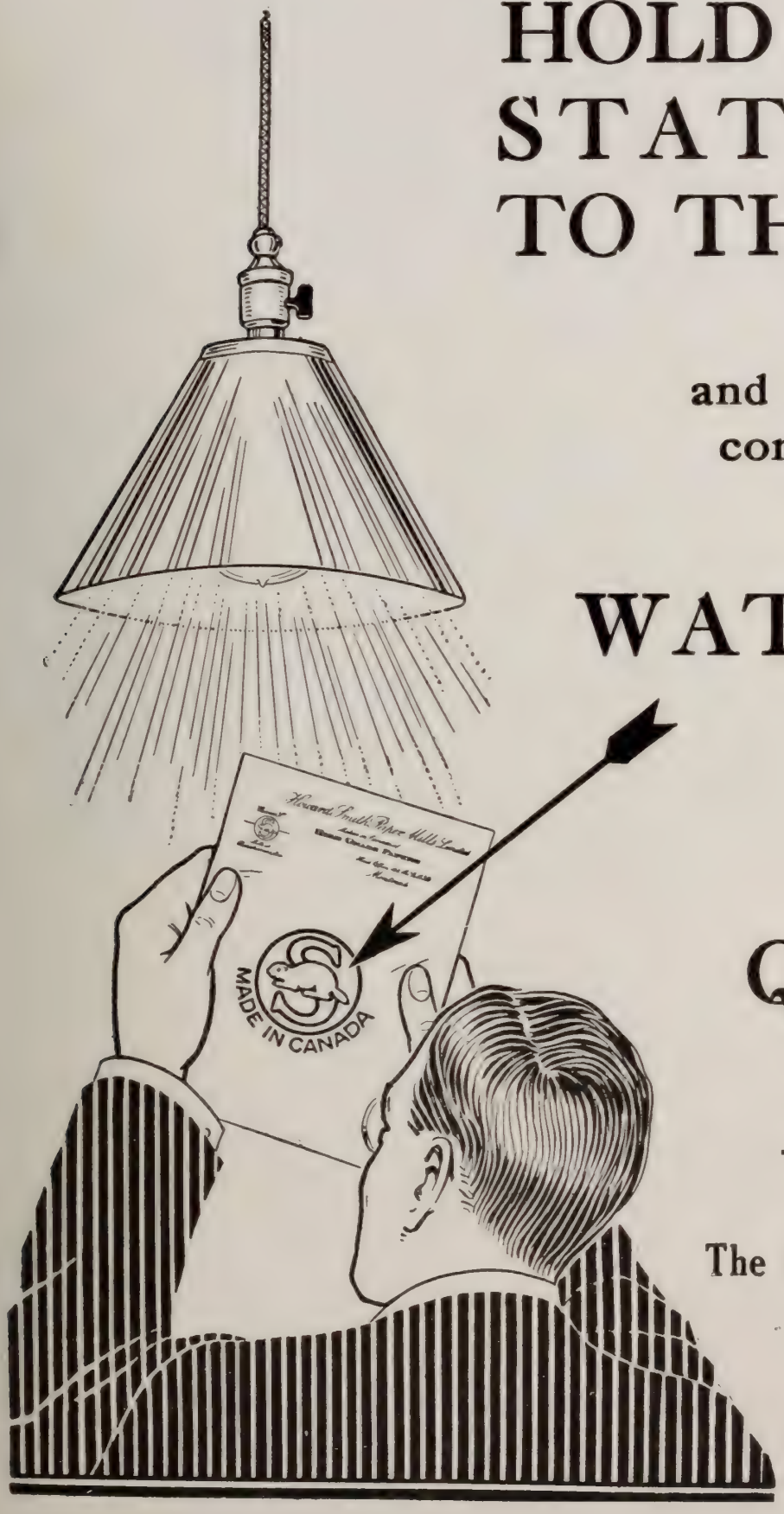
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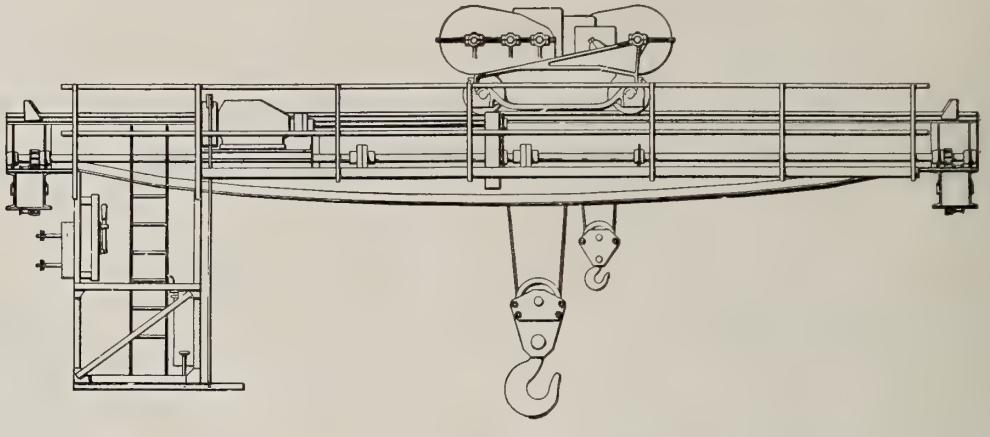
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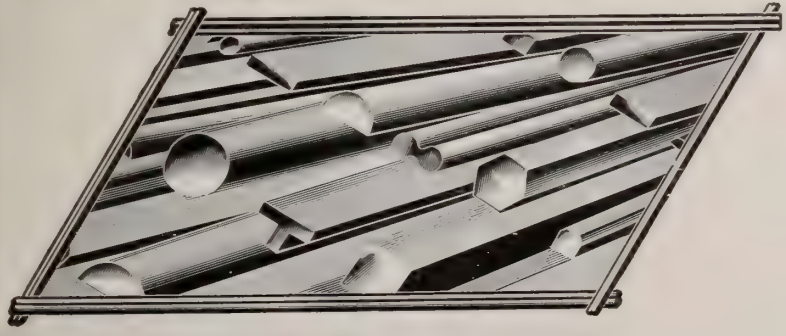
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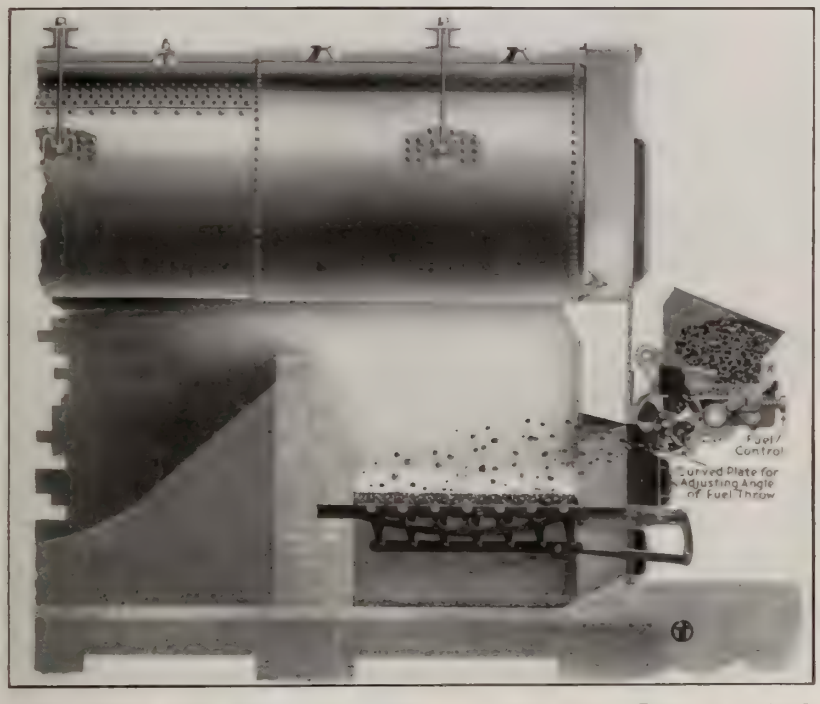
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CANADA STOKERS BURN CHEAP FUEL---AND LESS OF IT

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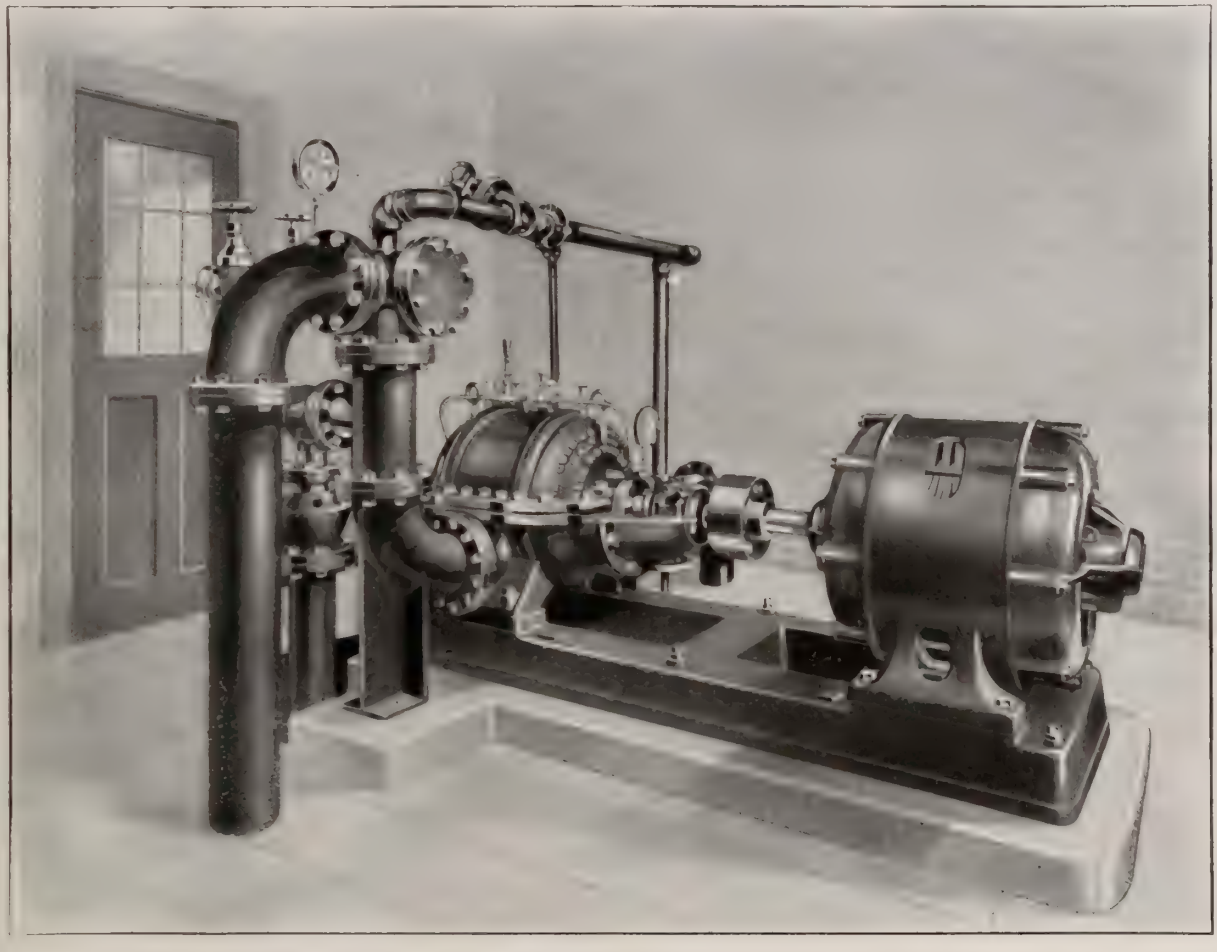
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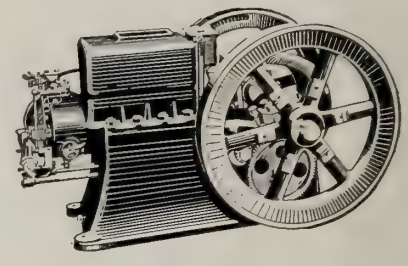
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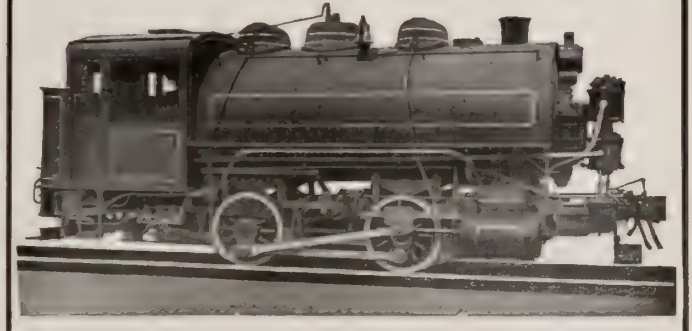


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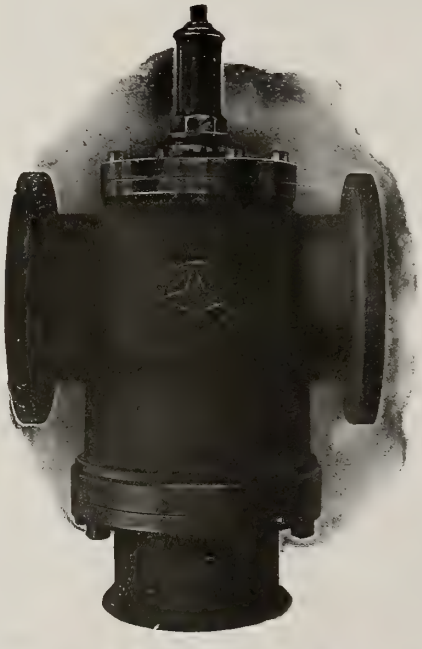
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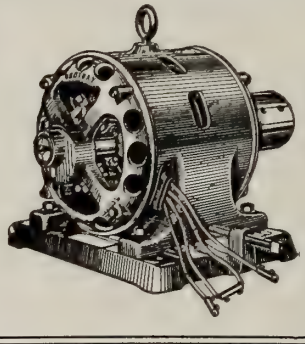
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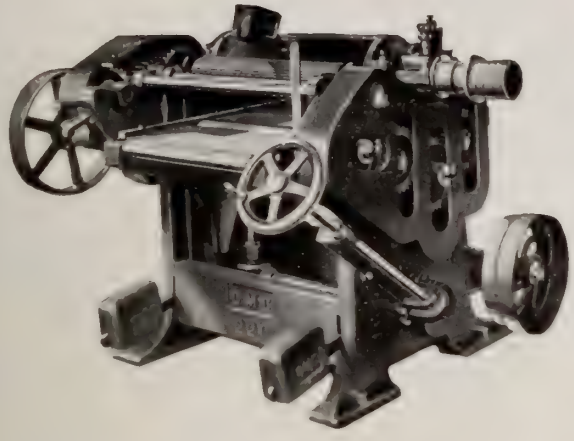
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March 1st, 1922.

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Gentlemen:—

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Mr. W. S. Fowler, in joining our staff, brings with him 15 year's experience as a practicing Patent Attorney before the United States and Canadian Patent Offices and in this way we trust that the corporations placing their business in our hands will feel that it is our desire to give the best possible service in Patent and Trade Mark preparation, prosecution and counsel.

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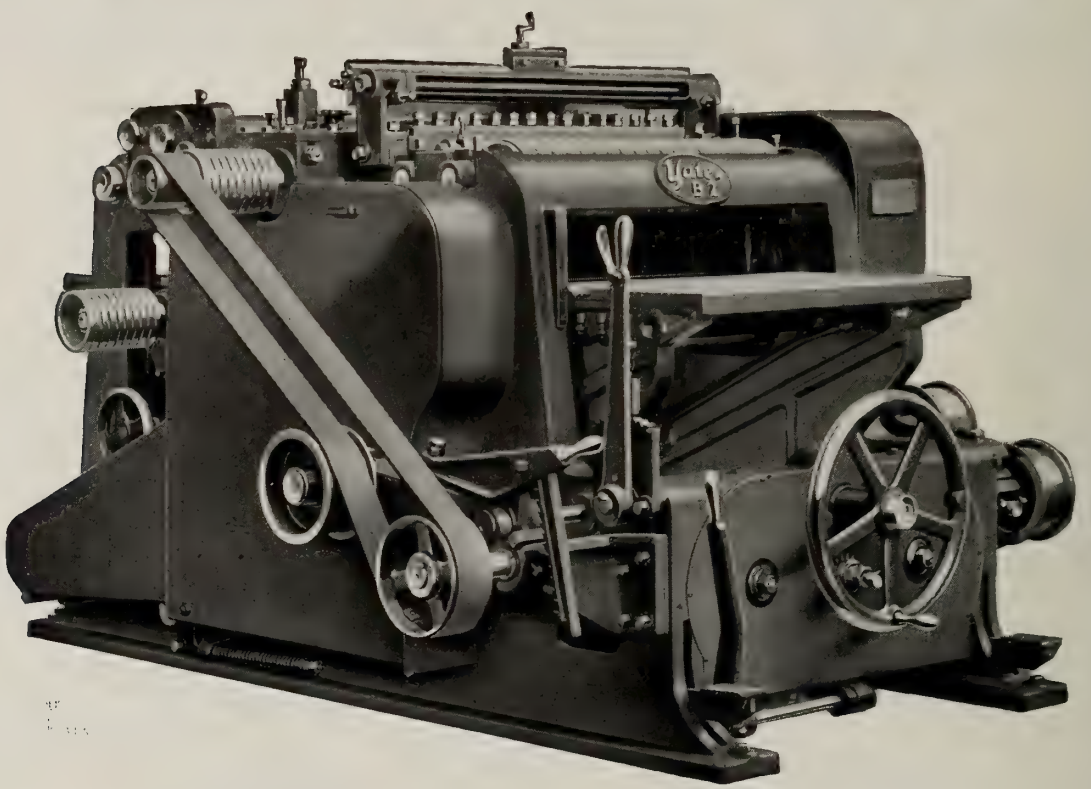
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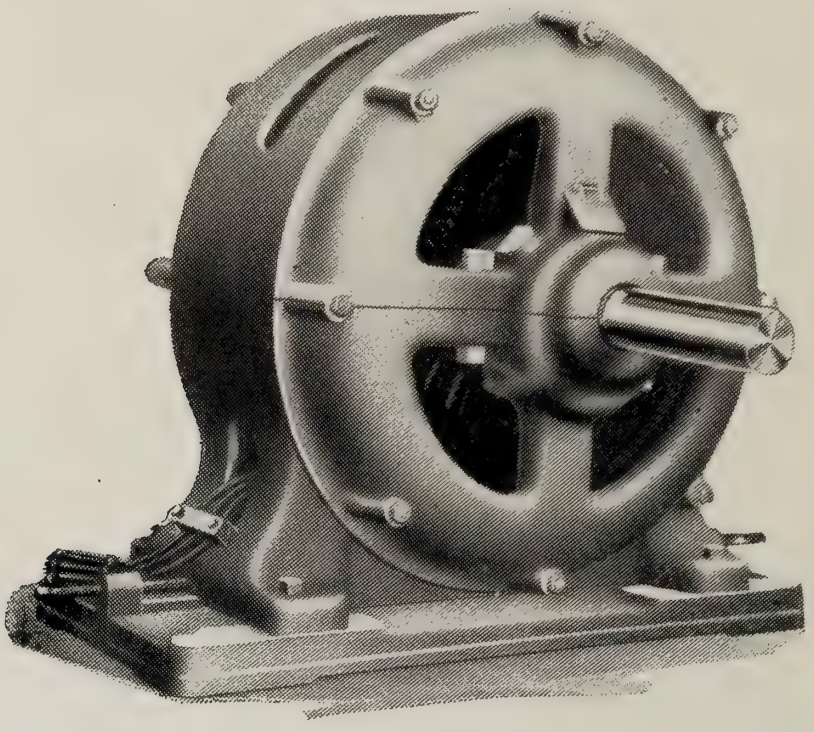
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Issued monthly as the official publication of the Canadian Manufacturers Association (Incorporated), and devoted to the advancement of the industrial and commercial prosperity of Canada

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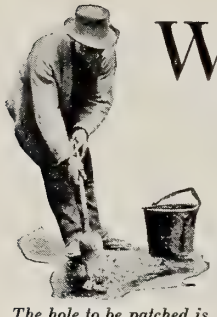


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Vol. XXIII. TORONTO, MARCH, 1922 No. 11

Editorial Comment

What Manufacturers are Saying.

SOME encouragement will be derived by those who are feeling rather depressed over present conditions from a perusal of the section of this number containing reports from Canadian manufacturers on the present state of their industries. There are a great many of these reports and they are representative of all sections of the country and of most of the industries. We are convinced that, taken as a whole, they give a very fair idea of conditions as they exist at the present time.

On the basis of this data, it seems quite safe to say that the outlook shows pronounced improvement. The large majority of the manufacturers, who have favored us with reports, state that they are experiencing better business than a year ago; many tell of increased operations; not a few indicate that they are taking on more hands. Even these who have not yet experienced an up-turn are much more hopeful and express the view that improvement cannot be long delayed. Only a limited number continue to view the situation with rather pessimistic eyes.

We hope that, in devoting space to this series of reports, we are contributing a little to restore confidence among our readers. There is in any case a distinctly better feeling in the business world and the more evidence that can be brought forward to prove that this improved sentiment has a solid basis, the better. May it not help things along, if those who are impressed with the views contained in the following pages, will bring the material to the attention of other business men with whom they come in contact?

Interesting Students in Industry.

MANUFACTURERS in Elmira, Ont. are showing a good example when they co-operate with the local school board in an arrangement under which the high school students are given an opportunity to visit local industries. There is nothing new in the idea of having students visit manufacturing establishments and view manufacturing processes. It has been done on many occasions. The originality of the Elmira plan seems to be that the undertaking is thoroughly organized. Instead of being simply a more or less perfunctory visit to some plant, arranged by the school teacher, a regular programme has been laid out so that the students will see all the industries under the most favorable conditions. The boys and girls are divided into small groups and on Friday afternoons at four o'clock these groups are taken to different factories and shown through them. Each group in time sees all the plants in the town.

A member of the school board gives two reasons for carrying out this series of visits. The first is that it affords an indirect way of advertising the industries of the town, especially in the case of the out-of-town students, of whom there are quite a number attending the school. The second is that it helps the students in their various lines of study when they are given an opportunity of seeing the actual production of many of the different articles with which they come in daily contact.

As a practical way of interesting the rising generation in the manufacturing industries of the country and showing them the part they are playing in building up the Dominion, the Elmira plan is deserving of every commendation.

Trade Exhibitions here to stay.

GREAT success appears to have rewarded the efforts of those responsible for the holding of the first Canadian Textile Products Exhibition in Toronto last month. In all the range of Made-in-Canade effort, greatest difficulties have confronted those who have endeavored to break down the prejudice in favor of imported articles of clothing. Considerations of style and quality weigh far more, when it comes to the selection of wearing apparel than they do in the choice of almost any other commodities and there has long been an ingrained feeling that the "imported" spelt fashion and the "domestic", the reverse.

The Canadian Textile Products Exhibition has done much to shatter this prejudice. It has been a defy thrown down to those who say that Canadian manufacturers

cannot produce goods capable of standing up against the competition of imported goods. While not intended to reach the consumer direct, it has carried the message of conviction to the retailer, who after all can do more than any other single agency to mould public opinion. Once get the retailer sold on the idea that Canadian-made goods possess the requisites of saleable merchandise and substantial progress has been made.

The Canadian Textile Products Exhibition, which will probably become an annual event, is a newcomer in a field that has already been successfully occupied by manufacturers in other lines. Furniture manufacturers have become accustomed to hold exhibitions from year to year, both in Toronto and in various centres of manufacture. More recently, manufacturers of toys have held an exhibition. A year ago there was an exhibition of boots and shoes that proved of great advantage to this industry.

We believe that all these displays will become permanent annual shows. Not only will they prove useful to buyers, who will be facilitated in their choice of goods by being able to examine the products of all manufacturers of a given line on one place and at one time, but they will be of advantage to the manufacturers themselves, who will be brought together in friendly rivalry. In time, we may expect that these trade exhibitions will have an interest for buyers outside Canada, especially if they can be so arranged as to synchronize with one another.

Co-operating for Mutual Advantage.

MANUFACTURERS in St. Catharines, Ont., have apparently come to the conclusion that they do not know enough about each other and the various products that are manufactured in local plants, for they are taking steps to remedy this deficiency. To begin with, two "get-together" luncheons have recently been held. Next, they propose to issue a pamphlet, containing full information about St. Catharines' products and to place it in the hands of travellers who will be asked to do missionary work for the local industries. Another plan will be the arrangement of a series of visits to the various manufacturing plants in St. Catharines so that purchasing agents and salesmen particularly may be better posted as to what goods are made in the city. By these various means it is hoped to advance the interests of the local industries.

It appears that the idea back of this movement orginated at a meeting of the directors of the Chamber of Commerce. One of the directors expressed the opinion that more good would be accomplished, were existing industries to be encouraged, than if assistance was constantly to be given to new enterprises, many of which were "fly-by-night" concerns, launched as stock-selling propositions. This view met with the approval of the directors and a committee was appointed to arrange for the "get-together" luncheons, with the results already enumerated.

The example of the St. Catharines manufacturers may well be followed by manufacturers in other cities. While it is often desirable to encourage new industries to locate in a place, especially those which will produce materials required in existing industries or will consume products made by the latter, it is frequently the case that not enough support is given to the older-established undertakings. To overcome this neglect, knowledge is the first essential and, in taking steps to inform one another about the various products made in local plants, useful work will be done. Such a survey may lead to the discovery that materials bought elsewhere could be made by some brother manufacturer and in this way the interests of the community will be advanced.

Ontario's Industrial Census in 1919.

AN examination of the figures contained in the preliminary survey of the manufacturing industries of Ontario for 1919, as issued recently by the Dominion Bureau of Statistics, indicates that in number of establishments and employees and in capital, the province experienced an increase over the preceeding years but that, in the value of products, there was a slight falling off. The figures, in comparison with 1917 and 1918, are,—

	1919	1918	1917
Establishments	No. 16,438	15,365	14,381
Capital	$1,583,161,271	$1,508,011,435	$1,335,968,699
Employees on Salary	No. 44,545	39,218	37,132
Salaries	$ 67,249,559	$ 56,802,691	$ 49,270,800
Employees on Wages	No. 278,814	294,754	289,503
Wages	$ 269,328,710	$ 263,937,523	$ 229,191,908
Cost of Materials	$ 943,622,018	$1,008,824,704	$ 822,842,054
Value of products	$1,737,543,996	$1,809,067,001	$1,533,738,655

In point of value of products, flour and grist mills stand first, with $150,061,254; slaughtering and meat packing second, with $129,994,795 and automobiles third. with $80,619,846.

As regards investment of capital, the order runs,—electric light and power first with $192,898,095; pulp and paper second with $95,281,040 and agricultural implements third, with $78,748,765.

In number of establishements, butter and cheese factories come first, with 1,104; lumber, lath and shingle mills second, with 852 and plumbing and steamfitting third, with 845.

An Argument for Made-in-Canada.

A BRITISH trade commission which recently visited Canada found, on inquiring among department store managers, that these institutions were steadily increasing the percentage of their purchases in Great Britain and were also making substantial increases in their purchases of made-in-Canada goods.

In commenting on this finding of the trade commission, the Montreal Herald says that it might be argued that the result is due to sentiment on the part of the consuming public. Such, however, is not the view of the managers of the big stores.

"They seem," declares the Herald, "pretty generally of one accord on the point that when Canadian goods are bought in preference to foreign stock they score by virtue of better quality or price. There may be, and no doubt are, stalwart Canadian and stalwart Imperialists who will buy inferior stuff home grown or of Empire

origin simply for that reason, but their weight and numbers are not considerable.

"Where sentiment does operate rather conspicuously, according to the same authorities, who have the jewellers and milliners to back them up, is in the purchase of expensive foreign luxuries—with stress on the word foreign—especially with the magic name of some European capital upon the box or the inside lining.

"And yet, during the recent hard times, many people who used to follow this fashion from year to year without variation, have been educated out of it and are now looking more earnestly into the questions of quality and wear; and by so doing are giving the Canadian manufacturer a "look in".

"This is about all the Canadian manufacturer asks of the purchasing public. He does not claim perfection in his wares when such is unattainable; nor does he claim superiority over foreign products where such would be ridiculous, but he does feel that in a general way he can match the other man without fear of being listed as an "also ran." He might reasonably chafe aginst a handicap which sometimes amounts almost to a boycott—as where idle folk determine to buy and flaunt foreign goods—but he has the satisfaction of knowing that this little habit of vanity is becoming more and more recognized and marked for what it is.

"The Canadian manufacturer knows the meaning of competition and the need for it. Given a fair start, however, he is not fearful of the outcome of whatever competition arises. He knows that the handicap against him is lessening visibly and faces the future with confidence."

Giving Encouragement to Sport.

AMONG the numerous forms of welfare work, the encouragement of sports seems to be well worth consideration on the part of manufactures. It has the merit of being beneficial to the health of the worker, is calculated to put the whole factory organization on good terms with one another and the management, and does not necessarily involve any heavy expense.

In Sherbrooke, the Canadian Peerless Jewelry Company, Limited, have taken the lead in encouraging sport among their employees. Recently they arranged for the holding of an indoor meet at the local Y. M. C. A., a form of entertainment which might well be copied by other manufacturers. Details were left to the employees, it being found that when this is done, more interest is taken in the affair. All that the company did was to give the prizes. The program of events included relay races, threading the needle, potato race, three-legged race, etc., quite a number of the stunts being arranged so that the girl employees could participate. The employees, officers and office help chipped in to procure the food.

Another direction in which the same company have been active has been in the formation of an industrial hockey league, which comprised this year the E. and T. Fairbanks Co., Panther Rubber Co., Canadian Connecticutt Cotton Mills and themselves. The Canadian Peerless Jewelry Co. formed an athletic association to look after the hockey; the sales manager donated a loving cup to be presented to the winner and the league itself made necessary arrangements for a rink. While bad weather interfered somewhat with the schedule of games, the movement has been such a success that we understand it will become permanent and that next year more industries will be included.

The foregoing is a single example of what one company can accomplish if the necessary energy is expended on the undertaking and it is referred to here by way of incentive to manufacturers in other towns and cities.

Legislation and Industrial Freedom.

"GIVE us back the thin statute books and more of the self reliance which means so much to the nation and to the individual." These are the words not of a prosaic business man but of a thoughtful and experienced Canadian judge—Chief Justice Perdue of the Manitoba Court of Appeal. With many years of experience on the bench, his Lordship is well qualified to deal with the questionable benefits of the super-abundance of legislation which is annually placed on our statute books.

A resume of last year's legislation may be instructive in the light of proposed legislation for the present.

Every provincial legislature had a session in 1921, and British Columbia had two. The effect of 1921 legislation in the provinces has been that expenditures have been increased. That a corresponding effort has to be made to raise more revenue, is seen from the increased taxes levied, while there is no evidence of a tendency to foster industry.

Quebec furnished the most outstanding piece of provincial legislation of the year in two bills—one revising Montreal's form of government and the other creating a metropolitan commission with limited jurisdiction over the city and adjoining municipalities. Improvement in finances was the object of a measure prohibiting municipalities from granting assistance in any way to industries. An item of labour legislation was the prohibition of strikes on the part of policemen, firemen, and other municipal employees.

Ontario passed statutes numbering 140, touching many fields and being supplemented by special committees on rural credits, timber dues, hydro electric radials, university finances and other matters in the financial field. The corporations tax, mining tax and succession duties were increased. Loan and trust companies had their deposit powers enlarged and several insurance amendments were passed. There was also imposed a tax on land transfers. Municipal amendments of the session were also numerous, several changes being made in the law relating to assessment of property and income.

The chief item of the Prince Edward Island Legislature's business was the incorporation of the Prince Edward Island Light, Heat and Power Company with two million dollars capital. This company is backed by outside capital and plans to generate and distribute power throughout the Province.

In New Brunswick, 98 acts were passed out of a total of 102 introduced by the Government.

Nova Scotia passed 199 bills during the twelve weeks that its legislature was in session. The outstanding event was an act providing for the purchase of the Dominion Steel and Nova Scotia Steel Companies by the British Empire Steel Corporation.

In regard to British Columbia, a total of 70 bills were passed out of 85 introduced. A new companies act and a consolidation of the provincial trust company law were passed. Prohibition was replaced by a system of government sale, and an arrangement was made with Coast Range Steel Limited, whereby the Government is to give it a bonus not exceeding $3.00 per ton of pig iron produced.

The Alberta Legislature passed about 95 bills. Saskatchewan passed legislation providing increased grants for education and the maximum payment under the Workmen's Compensation Act was raised from $1800 to $2000.

Manitoba passed legislation empowering Winnipeg to collect an income tax. A provincial income tax bill was withdrawn, but the net profits of corporations were taxed by 2%, and several other taxes increased.

All kinds of legislation are being tried. An endeavour has been made to convert incompetent farmers into competent farmers by legislation; to finance individuals in individual enterprises by government loans, and during the past year or two, it has been a common experience for those who, through individual incompetence and in some cases wastefulness, have met with failure to consider that they had a just claim for assistance from governments.

The latest instance of this paternalism is a proposal that a system of industrial credits similar to the rural credit scheme be created in the Province of Manitoba. It is suggested that the Provincial Government raise five million dollars and loan it to the storekeepers, small merchants, small manufacturers and tradesmen either in business or wishing to engage in business on their own account.

In Ontario, legislative schemes are reported to be on foot towards watching and regulating the transactions of manufacturers and merchants, and it also seems that the Ontario Government proposes to set itself up as a public mentor in the matter of company promotion, with the result that what ought to be the responsibility of the individual will of necessity be thrown upon the shoulders of the state. Can the state discharge such a duty? The fact is that there is too much meddling by governments in business and we need to reverse the situation and put a little more business into governments. Let us get back to the days of "thin statute books and a self-reliant people."

Industry as a human enterprise can never thrive without freedom. One of the great problems at present being fought out in our economic battles is whether industry shall be free or fettered. Freedom is not license, and freedom does not mean that one person or one enterprise can violate a number of others. It means nothing more than that privilege of reaching fixed objectives with due regard for the rights of others.

Unreasonable taxation causes business to hesitate, because taxation limits the freedom of industry. Government control or over-regulation will throttle down industry, and no matter how ideal governmental regulations may be, in effect business will not thrive under it and the prosperity of the nation will suffer in consequence.

A Prophet who Practises.

THE name of Frank J. D. Barnjum of Annapolis Royal, Nova Scotia, has become tolerably familiar to the people of Canada through his persistent advocacy of the immediate necessity of forest conservation. Mr. Barnjum has written again and again on the subject and has spoken in its support. He has constituted himself a prophet, warning Canadians that unless drastic steps are taken to preserve the forest wealth of the Dominion, our wood products industries will be wiped out in nine or ten years. Of course, he is not alone in his campaign. Many other patriotic people are seized of the danger and are adding their voices to his as occasion offers.

It is gratifying to observe, in connection with Mr. Barnjum's efforts, that he is not content merely to exhort. Preaching and practice in his case go hand in hand. In his own province of Nova Scotia, he has recently made a generous offer of a cash bonus of $2.00 per acre to any farmer who will plant spruce or pine seedlings this spring. Whether or not the offer is widely accepted, and we trust it will be, it shows the right spirit and may pave the way for the extending of encouragement from other sources.

Mr. Barnjum, in a recent paper on "more startling forest facts," lays down seven policies which should be adopted by Canadian pulp and paper companies,—

(1) Reduce the cut on their own lands as near one-half as possible;
(2) Insist on an embargo or export tax of not less than $10 per cord on fee land wood, so as to save for the mills of Canada the large amount of wood that is now being shipped out of the country;
(3) Insist on more and better fire protection;
(4) Insist on the burning of all slash;
(5) Insist on the utilization of every inch of the tree that is cut down;
(6) Improve present wasteful logging methods; and
(7) Insist on reforestation on a large scale.

High prices for wood and paper are not regarded by Mr. Barnjum as an evil but are declared to be the most practical conservation measure that can be had. Prices, he declares, will have to go much higher to compensate for the cost of slash burning, increased fire protection, reforestation, continual increase in length of haul and increasing scarcity in supply.

Stress is laid on the havoc wrought by the spruce bud worm and its resultant pests or followers. The state of Maine has lost through dead and dying timber, 50 per cent. of her spruce and fir stand. The same figure applies to New Brunswick. The loss in Quebec has been set at 75,000,000 cords. Nova Scotia has practically escaped but the scourge is working west through Ontario.

Textile Manufacturers Hold Successful Exhibition in Toronto During February

By J. H. Saunders

THE Made-in-Canada movement received fresh impetus during the week of February 13th on which date the first Canadian Textile Products Exhibition opened in the King Edward Hotel, Toronto. This unique display of the products of some eighty Canadian manufacturers of varied lines was conducted under the auspices of the Canadian Manufacturers' Association, the Canadian Woollen Manufacturers' Association, the Canadian Association of Garment Makers, the Association of Clothing Manufacturers of Toronto and the Clothing Manufacturers Association of Montreal. Its success was demonstrated by the enthusiasm of everyone concerned, and by the fact that many exhibitors have promised their support to a larger exhibition of the same kind when it can be arranged.

The Canadian Textile Products Exhibition was the result of a desire expressed by a few manufacturers of textiles that such a show be held. Among the original sponsors of the idea were R. P. Sparks, Sparks - Harrison, Limited, Hull, Quebec, Richard Thompson, Hawthorn Mills, Limited, Carleton Place, Ontario, and F. W. Stewart, Cluett, Peabody & Company, Limited, Montreal. In September last, notices were sent out to a large number of manufacturers of many different lines of men's wearing apparel, asking them to attend a meeting which was held on the 28th of that month. At this meeting consideration was given to the advisability of holding such an exhibition and after some discussion the character and date of the display were decided.

The views of the members were at first divided as to whether the exhibition should be open to buyers and merchants only or whether it should be of an educational character and open to the public, thus providing for a demonstration of the quality and merit of goods produced in Canada. It was finally decided that the attendance be limited to buyers, and a committee, with R. P. Sparks as chairman, was appointed to develop the details.

A number of subsequent meetings were held, and early in December representatives of the Retail Merchants' Association intimated that if an exhibition were held in February, conventions of the Ontario retailers' sections, covering drygoods, men's clothing, men's furnishings, merchant tailors, hatters and furriers would take place at the same time, and thus a large attendance of possible buyers would be assured. This proposal appealed to the manufacturers' committee and arrangements were then made for holding the convention and the exhibition in the King Edward Hotel, Toronto, from February 13th to 17th, inclusive.

The next step was to secure the services of a competent manager. For this responsible position Col. C. H. Gibbons, a man of wide experience both in publicity work and in the promotion of exhibitions was secured. The time at the disposal of the manager was very limited, and it is a remarkable tribute to his energy that he was able to sell the space available before the beginning of the month in which the exhibition was held. This is all the more remarkable in view of the fact that the project was a new one to practically all who participated, and the manager consequently had to overcome a certain reluctance frequently shown towards new ideas. However, with the hearty co-operation of everyone concerned, arrangements proceeded smoothly and the result was all that could be desired.



With the consent of Canadians, the Star Turn will perform

Practically the entire mezzanine floor of the hotel was utilized, approximately 7,000 square feet of space being required. The booths were set up and decorated during the two days preceding the fair, and by the afternoon of the 13th all the finishing touches had been applied, and the exhibitors were ready to do business with the stream of customers that flowed through the aisles.

There was little evidence of business depression to be seen by anyone strolling through the exhibition. Everywhere one ran into buyers placing their spring orders, and on the faces of the exhibitors one saw the smiles that said plainly "Business is good."

For the convenience of visitors, the exhibits were grouped according to the lines manufactured. Entering from the main staircase one came to the displays of overalls and workshirts. A little further on was the haberdashery. Then one came to hats and caps, woollens and knit goods, and clothing, which took up the largest space of all.

Manufacturers themselves were surprised at the variety and excellent quality of the products displayed. Never before had such a representative collection of Canadian-made textiles been brought together under one roof, and it is safe to say that if the fair should be repeated it would be even bigger and better, as a number of manufacturers were not able to arrange for exhibits, owing to the short notice and limited space.

One of the visitors to the exhibition was the Rt. Hon. G. F. Pearce, Minister of Home Territories for Australia, who is in Canada for the purpose of effecting reciprocal trade agreements. Mr Pearce was under the impression that Canada had no textile industry, but following his inspection of the show he acknowledged his mistake and confessed surprise at the progress which had been made. He was of the opinion that a good export trade with Australia could be built up. A New York visitor who had come to Toronto after seeing a similar fair in the United States gave the Canadian exhibition much the higher place in his comparison.

The values of the Canadian goods as well as the quality were frequently shown to be superior to imported articles. One buyer who had been handling a United States line of fine hosiery was greatly surprised to discover that the quotation on a similar Canadian article was 10% below what he had been paying. Another when told the price of a fine merino blanket could not be convinced that it was not half cotton.

Two very interesting booths were those of the Canadian Panama and Straw Hats Company and the Wolthausen Hat Corporation. These were both process exhibits, the former showing the various stages in the manufacture of a straw hat and the latter the felt hat from rabbit fur to finished product. The richly coloured display of the Winchester Dye Company was also noteworthy, as a mark of further progress in Canadian textile industry.

Possibly one of the best features of the exhibition was that in the minds of the promoters when they arranged to hold it in conjunction with the retail conventions. That was the opportunity it offered for manufacturers and retailers to get into closer touch with each other. By way of further cementing the good will thus created, the manufacturers who were exhibiting entertained the retailers to a banquet on February 15th. Over 800 retail merchants, buyers, wholesalers and manufacturers attended this function, which took place in the ballroom of the hotel, with F. W. Stewart as chairman.

The principal speaker of the evening, Sir Charles Gordon, president, Dominion Textile Company, Limited, reviewed the present

economic situation and spoke of the need for constructive work to bring about world prosperity. Canada's financial position was absolutely sound, he said, and no substantial business on a firm foundation had anything to fear.

R. P. Sparks, chairman of the Textile Products Exhibition, dealt with the relation of the retail trade interests to those of manufacturers. He stated that there were highly competitive conditions in the clothing trade, and that the only consideration in fixing prices was the actual cost of production.

"One of the motives which inspired this exhibition was that in looking over statistics of our imports into Canada of manufactured goods we find that the item of textiles is the largest item on the list," said Mr. Sparks. "We are convinced that this is not necessary. We felt that possibly an exhibition of this character would be a demonstration of the fact that Canada was producing textiles and clothing in quality and value equal to anything in the world. The campaign which has been carried on for some time with the object of stimulating the demand for 'Made-in-Canada' products has in part, based its appeal to the Canadian people on their spirit of patriotism. That appeal has every justification, but it is necessary that there should be something more than the patriotic appeal. Canadian manufacturers must be prepared to justify that appeal by the production of goods which, on their own merits, deserve the patronage of the Canadian people.

"At the outset I want to state that the clothing industry in Canada is one hundred per cent. efficient. Whether it be judged from the standpoint of mechanical efficiency or of technical skill, whether from a standpoint of design or workmanship or all-round quality, the product of Canadian manufacturers will compare with anything produced in the world.

J. S. McKinnon, ex-president of the C. M. A., R. F. Fitzpatrick, president of the Clothiers' and Men's Furnishing Section, E. W. Trowern, secretary of the Dominion Board, Retail Merchants Association, and B. W. Zieman, president of the Merchant Tailors' Section, also gave interesting speeches on the business situation from manufacturers' and retailers' points of view.

While the Textile Products Exhibition banquet was proceeding the Canadian National Exhibition was entertaining, in another room of the hotel, the prominent stock breeders of Canada. To them on behalf of the former body, J. I. McIntosh, treasurer, carried the fraternal greeting reproduced on this page. He was enthusiastically received, and T. A. Russell returned with him to express the thanks and the reciprocal greetings of the stock-breeders.

It is doubtful whether any exhibition has ever achieved such an unqualified success on its first appearance as did this textile show. To sum up briefly what was accomplished:—There were cared for in the 7,000 square feet of available floor space no fewer than 77 exhibits, among which clothing in various departments was the dominant factor, well supported by the woollen and cotton manufactures, knit goods, shirts and overalls, neckwear, hats, rainproofed garments, etc. Contributions in space rentals aggregated about $11,000, approximately 20 per cent. of of the involved cost to exhibitors, who represented in their combined annual turnovers roughly $140,000,000. The attendance during the five days of the exhibition was 4,000, with the largest buyers' delegation, (in proportion to provincial population) from British Columbia, Prince Edward Island being in second place.

Montreal and Toronto were on practically equal footing as to number of exhibits, although Montreal's investment was necessarily larger on account of added transportation and hotel costs, etc. Hamilton was a good third in the matter of space. The easternmost exhibit came from St. Hyacinthe, Quebec, and the westernmost from Walkerville, Ontario, although, had space been obtainable at any cost the second day of the exhibition, an enterprising Winnipeg house, manufacturing knit goods, would have claimed that distinction.

The opinions of exhibitors are illustrative of the results obtained. S. J. Williams, dean of the garment-making industry in Canada, told the exhibitors at their final breakfast gathering:— "Made-in-Canada has been *talked* for years, but in this exhibition we have seen the first and best concrete demonstration of achieved results."

A. J. Thomson, Dominion Linens, Limited:—"All exhibitors gained more through the one short week of the exhibition than they could have hoped to through extensive advertising campaigns extending over a period of six months."

The persistency of the exhibition publicity was such, according to a Montreal witness, that he "could not get away from it" and had to pay his first visit to Toronto, "just to have a look at the place that a slip in every letter he opened assured him he had to see."

"We had been trying unsuccessfully for six months to interest two large firms in particular in our lines," says Mr. Brown of The Niagara Neckwear Company. "Representatives of those firms saw our display. They later made appointments and we are getting together. In both direct and indirect results taking space was one of the best business investments we have gone into."

"We have established at or through this show new connections that should mean $50,000 worth of business to us in the next six months" is the comment of Semi-Ready, Limited, Montreal.

Peabody, Limited, participated in the show, counting only on the publicity it offered. "I didn't even bring an order book with me," says Sales Manager R. Pickell. "I didn't suggest buying to anyone unless he showed an inclination in that direction. But I booked about $9,000 worth of business during the show and had to come back to close up another $1,500 order, with yet another of $6,000 or $7,000 to follow—all aftermath of the exhibition."

With these comments and many more of a similar nature it is not surprising that the exhibitors have decided to organize the exhibition as a permanent institution.

At the meeting on the last day of the fair it was decided that a committee representing all the trade associations concerned should be appointed and that a carefully prepared questionnaire should be sent to all exhibitors so that accurate and reliable data for the development of future plans could be secured. An autumnal show in Montreal is seriously talked of, with the Toronto exhibition made an annual spring event, while for the purposes of Made-in-Canada propaganda excursions may be made to Winnipeg and possibly beyond.

To the Canadian National Exhibition Association and your guests of the evening, the live stock breeders and exhibitors of Canada, heartiest felicitations on this auspicous occasion.

Happy Circumstance has brought together tonight under one and the same roof, the representatives of two great departments of national industry, the stalwart and substantial sons of the farm and ranch, whose persistent effort over a long period of years has built up a reputation for pure bred stock that places Canada in the forefront of the great agricultural nations of the world; and the producers and distributors of the varied products of the rapidly expanding textile industries of the Dominion.

We are brother producers, working in different fields it is true, but united in our desire and determination to make the words, "Produced in Canada", stand for the highest and best in quality production in the world.

Tonight we come in close contact personally; we unite in loyalty and devotion to our King and country; we applaud the same sentiments of faith in the future of Canada, hope for its prosperity and charity towards one another and all men.

Soon we shall return to farm and factory, warehouse and store, and points of contact will become further removed. Yet our interests and associations will continue to touch and overlap in many places. May we not hope that a broad and generous spirit of friendliness and toleration will remain as at least one outcome of tonight's brief intercourse.

Co-operation in all branches of production will build up a great nation in this vast Dominion. We are consumers of your products; you are consumers of our products. Let there be continued unity in our support the one of the other.

In your further deliberations, we hope that much will be accomplished for the welfare of the great stock-breeding industry and that you will all return home refeshed in mind and body and encouraged to go ahead towards still better and greater achievements.

The Greeting from the Textile Manufacturers to the Stock-Breeders

Furniture Exhibition Held At Stratford

Stratford furniture manufacturers held their annual exhibition during the two weeks, January 9 to 21 and a goodly representation of the retail furniture dealers of Canada visited the city during that time. While the buying was not as heavy as during 1919 and 1920, yet the volume of business placed, conditions being considered, was very satisfactory. Worthy of special mention this year was the large range of new designs, exceeding those of any previous exhibition.

With regard to prospects of the industry, while prices have been reduced to their lowest level, yet there is a disposition on the part of the retail trade to buy cautiously and as a result there will be some curtailment in production throughout the entire year as manufacturers generally are not anticipating that things will be normal before early spring of 1923.

Each of the Stratford firms exhibited its lines in its own plant, where specially decorated portions of the factory were set aside for the purpose. In addition there were also exhibited the lines of the Meaford Manufacturing Co. of Meaford and the Gibbard Furniture Co. of Napanee, both of which were accommodated in the local furniture plants.

Complete Made-in-Canada Bus for Toronto

The Eastern Canada Motor Truck Co., Limited, Hull, P. Q., last month completed a fifty-one passenger double-decked bus for service in Toronto. It was ordered by the Toronto Transportation Commission and will go into service in competition with both American and British buses now in use on routes in certain parts of the suburbs. The company claim that they have introduced many new features and that their bus, being made-in-Canada, will be well suited to the Canadian climate.

Statements in regard to Matters connected with Trade and Commerce presented to the Government of Canada by a Deputation from the Canadian Manufacturers' Association, Ottawa, February 23rd, 1922

FRENCH TREATY

THE French Government, although not obliged by treaty to do so, has exempted United States goods from increases applicable under the French general tariff, while it continues to apply those increases against Canadian goods.

The result is that on Canadian goods (other than the few lines which, by treaty, are subject to the French minimum tariff rates) France levies double to three times as much duty as she levies on similiar goods imported from the United States.

We placed these facts before the previous Government (see appended copy of letter to Minister of Trade and Commerce) but, so far, France has made no change in these arrangements of her tariff.

The following Canadian products, among others, now suffer under this tariff discrimination if shipped to France:—wrought iron, iron bars, steel bars, tubes welded or not, furniture, pianos and organs, phonographs, varnishes, machine tools, locks, many forms of hardware, metallurgical alloys and substances, spirits, valves, brass goods, agricultural implement parts, shafts, screws, bolts, link belting, spark plugs, etc.

The following examples are furnished:

1. **Stellite** (an alloy of cobalt, chromium and tungsten). Under the 1907 Franco Canadian Convention this article entered France at the minimum tariff rate of 5%. The general tariff rate was 7½%. Stellite from the United States enters France at the old general tariff rate of 7½%; but the increases referred to make the French tariff rate on Canadian stellite 20%.

2. **Valves.** The French tariff on valves of United States and Canadian manufacture respectively, compares as follows:

	French minimum Tariff against U. S. Valves	French rate on Canadian Valves.
	Francs per 100 kilogs.	
Weighing 1 kilog and less	140.00	350.00
more than 1 and less than 10	122.50	306.25
10 to 50 kilogs inclusive	105.00	262.50
More than 50 and less than 300	70.00	175.00
300 kilogs and more	52.45	131.22

3. **Bolts and Screws.** These goods are not included in the Canadian or United States treaties with France. But the French tariff on these goods of United States and Canadian manufacture compare respectively as follows:—

	French rate on United States Goods.	French rate on Canadian Goods.
	Francs per 100 kilogs.	
Diameter less than 3 mm	294	784
3 to 8 mm	252	616
8 to 12 mm	189	476
12 to 18 mm	147	392
18 to 25 mm	126	336
25 mm or more	105	280

All lines of Canadian goods, except the few lines which, by treaty, are subject only to the French minimum tariff rates, as a rule, are correspondingly affected.

We respectfully urge upon your Government the necessity of pressing for the immediate removal of the said tariff discrimination.

Note: Exhibits submitted with this statement appear in Appendix 1.

CANADIAN CUSTOM'S APPRAISAL OF DEPRECIATED CURRENCIES

IN an effort to safeguard Canadian industry against the effects of "dumping" of imported goods resulting from disorganization in values because of depreciation of foreign currencies, Parliament, on the advice of the previous Government, enacted legislation as follows:—

> "Notwithstanding any of the provisions of this section, in computing the value for duty of the currency of an invoice, no reduction shall be allowed in excess of fifty per cent of the value of the standard or proclaimed currency of the country from whence the goods are invoiced to Canada, irrespective of the rate of exchange existing between such country and Canada on date of the shipment of the goods."

This legislation largely resulted from evidence supplied to the Tariff Commission in 1920 on the need of Canadian industry for some such provision to limit "dumping" of foreign goods.

The evidence of numerous witnesses established that much unemployment in Canada is caused by the lack of adequate anti-dumping legislation under present international trade conditions.

We think unbiased evidence of the foregoing appears in a report on the foreign exchange situation which was issued January 9th, 1922, by the United States Tariff Commission. The following statements are quoted from this report:—

> "In the case of Germany, however, there is yet a great discrepancy between the internal value of the mark and its gold value,—slightly more than 2 to 1 in 1921."
>
> "A comparison of wages in the United States, England, France, and Germany shows that they are less adjusted to a gold basis than are prices. In May, 1921, the standard wage in Germany for factory workers was, roughly, 10c. per hour in gold as compared with 20c. to 25c. in France, 30c. to 40c. in England, and 50c. to 75c. in the United States."

In the case of Germany the discrepancy throughout 1921 averaged more than 2 to 1. In many lines produced in Germany there would be no discrepancy.

In others the discrepancy would greatly exceed the uniform average of 2 to 1. Canadian industries which are in this latter category should be safeguarded against unfair competition due to dislocation in exchange. The same results from such unfair competition are experienced by the greatest industrial nations; and, accordingly, the United Kingdom, France and other great countries have taken action to safeguard their people from unemployment resulting from such unfair competition.

The measure of last session does not adequately limit such dumping because the full effect of its provisions are not effective in the case, say, of German goods which are shipped to Canada from some intermediate country.

Therefore, we respectfully urge the Government to provide legislation which will effectually limit dumping of foreign goods in to Canada through the abnormal exchange situation.

Note:—Exhibits submitted with this Statement appear in Appendix 2.

ANTI-DUMPING LEGISLATION

WE have pleasure in recalling the fact that the present Minister of Finance initiated the Special or Dumping Duty Act of Canada, passed by Parliament in 1904.

That Act applies additional compensating duties when goods produced in other countries are sold for export into Canada at prices substantially below the "home" selling price in the country of export.

However, there is a special and important kind of dumping that that Act does not control.

The following is an example:

The sale of ladies' garments depends on seasonal styles. Therefore, they must be sold during the season for which designed. In the United States the spring and summer begin much earlier than in Canada. Before a season reaches its height in Canada, United States manufacturers of ladies' garments know what quantity in each line will be left on their hands which will not be salable at regular prices to United States dealers. They offer these "left-overs" as job lines at prices equal to or below cost of production. Thus an abnormally low "home" selling price in the country of export is established; and the importation under Customs duties based on such prices disorganizes the domestic market of Canadian manufacturers of similar garments. The Customs' acceptance of these distressed prices works an injustice to the Canadian garment industry which must buy materials at regular prices and pay import duties accordingly. The result is trade depression and unemployment.

Numbers of other Canadian products are similarly affected by reason of home selling prices in the country of export at certain times dropping below the cost of production.

Some countries, including Australia, have adopted legislation against such "dumping."

In the national interest, as well as in the interest of those who are directly affected, this method of dumping should be limited as much as possible by anti-dumping legislation.

The following legislation of last session was aimed against such dumping:—

> "Provided that the value for duty of new or unused goods shall in no case be less than the actual cost of production of similar goods at date of shipment direct to Canada, plus a reasonable profit thereon, and the Minister of Customs and Excise shall be sole judge of what shall constitute a reasonable profit in the circumstances.

We respectfully ask that this or more effective legislation to limit such transactions may be applied by the Government.

Note:—Exhibits submitted with this Statement appear in Appendix 3.

MARKING COUNTRY OF ORIGIN ON IMPORTED GOODS

WE respectfully beg to speak in support of the principle of Section 12 (a) of the Customs Tariff Act passed at the last session of Parliament.

The first United States marking provisions appear in the United States Tariff Act of 1890,—see copy appended, marked "A". In 1909 it was amended as it reads today; and the Canadian Act seems to have been modelled on it.

The United States Congress never debated these marking provisions, nor did it hold hearings on the subject. The provisions were apparently accepted by all parties in the United States subject only to the introductory remarks by Congressman McKinley when the bill was introduced by him on May 7, 1890. A copy of his statement to Congress, taken from the Congressional Records, is appended, and marked "B".

Many other countries have marking regulations against imports which are much more drastic than the United States provisions.

The principle that purchasers have the right to know the name of the country which produced the imported goods they buy is surely reasonable.

Some might suggest that this policy should also require Canadian products to be marked for domestic sale with the words—"Made in Canada". We agree but think that it would be impossible to apply it to the thousands of manufacturing establishments such as blacksmith, millinery, bakery, and other establishments. The baker in the small village makes bread, biscuits and cake. The milliner, the dressmaker, the tailor, the tinsmith, all make goods which correspond in appearance and use with like goods made in large factories. The local village confectioner makes a proportion of the candy he sells; the cobbler makes a few pairs of boots to order, etc. These identical industries throughout the Dominion are in every stage of development up to very large factories; and it would not be practicable to enforce a domestic marking act.

But concerns which engage in export trade are proportionately few and, as a rule, can readily observe marking requirements. To be successful exporters they must know the Customs regulations and the marking requirements of the country to which they ship their products. Canadian exporting firms have to conform to the provisions of foreign marking acts.

We respectfully submit that any marking act should be applied along practical lines so as to avoid useless expense or injury to goods, and should not interfere with Canadian domestic production or production for export; and we recommend that the Government consider the desirability of waiving the 10% penalty duty under the provision of the present act.

Note:—Exhibits submitted with this Statement appear in Appendix 4.

TAXATION

IN submitting our views on taxation, it is recognized that the Great War has laid on Canadians a heavy financial burden which must be paid in taxes for many years. The problem of applying this taxation, both in old and new forms, with a minimum of injury to the development of Canada, is a difficult one for the Government to solve, and we beg to express our desire to co-operate with the Government in reaching that solution.

The main policy pursued during and succeeding the War, probably because of its convenience, was to tax accumulations of capital very heavily through such forms of taxation as the Business Profits War Tax, the Income War Tax, as regards corporations, and the Income Tax on individuals. These were productive only so long as profiits and incomes were large. When profits and incomes shrank these taxes became proportionately ineffective.

These forms of taxation were drains upon capital, when depression came, reserves, which should have been conserved to tide industry over the dull period, had been depleted by taxation. During the last calendar year 559 manufacturing companies and 1892 trading companies in Canada failed, with total liabilities amounting to $73,299,101.

Capital, finding that surpluses were so heavily taxed in good years, without adequate provision for deficits in bad years, is avoiding the risks of manufacturing and commerce, and is taking refuge in bonds, mortgages and tax-free securities.

This is a serious situation, because a young country such as Canada, of great area, sparsely populated and possessing abundance of raw materials, must secure the investment of capital in order to develop agriculture and industry, attract immigrants and thus pay her debts.

It is apparent that a more intense application of taxation to manufacturing and commercial concerns will not only fail to produce additional permanent revenue, but will also increase the mortality of business enterprises.

It seems inevitable that the basis of taxation must be broadened, that is, more people will have to pay taxes according to their ability.

Last year a special committee of the Canadian Manufacturers' Association, in co-operation with other organizations, investigated the problems of taxation, not only in Canada but also in the United States, Great Britain, France and other countries. This Committee submitted the following recommendations to the Dominion Government:—

(a) That the Business Profits War Tax Act shall not be re-enacted.

(b) That the Income War Tax Act as regards corporations shall be repealed.

(c) That the present Sales Tax shall be adjusted so so as to provide the additional revenue needed by the Dominion Government.

At the last Session of Parliament the Business Profits War Tax Act was not re-enacted; the Sales Tax was re-adjusted so as to provide additional revenue; but the Income War Tax Act as regards corporations was not changed.

As we believe that the general policy outlined in these proposals is sound, we respectfully beg to submit the following similar representations to the present Government of Canada in the hope that Parliament will see fit to act favourably on them at the coming Session.

(a) That duplication of taxation be avoided as much as possible.

(b) That the Income War Tax Act as regards corporations shall be repealed.

(c) That the present Sales Tax shall be adjusted so as to provide additional revenue.

In considering (a) and (b), attention is drawn to the case of a company operating in all the nine provinces of Canada. This Company is taxed by the Dominion Government; it is taxed by each in all cases as a corporation. Its shareholders are also taxed by the Dominion, Provincial and Municipal Governments on property, business, dividends and income.

We submit that the Dominion Government should make an arrangement, with the Provincial Governments, whereby this duplication would be, in part at least, avoided.

In rgeard to the Sale Tax we beg to advocate:—

That as the sales tax is a tax payable by the purchaser manufacturers and wholesalers should not be held liable for any taxes which they cannot collect owing to the purchaser becoming insolvent or refusing to pay, even though the manufacturer or the wholesaler has in the meantime advanced the amount of the tax to the Government when making his monthly returns.

PREFERENTIAL TARIFF AUSTRALIA AND CANADA

WE beg to recall the fact that Canada was the first British country that established a tariff preference for British goods. This policy has been gradually reciprocated by most of the English speaking British Dominions. Through the reciprocal British preferential tariffs which have been extended to Canadian products, the policy initiated by this Dominion has already developed our foreign and domestic trade. We believe that this development will be continued by such an extension of this policy as will result in the extension to Canada by remaining British countries of preferences corresponding to the preferences now provided in the tariff of Canada.

Australia is one outstanding English speaking Dominion that has not agreed to establish British tariff preferences with Canada. It is most desirable that such an arrangement be completed.

The foreign trade of Australia is valuable. The purchases of the United States from Australia, and the sales of the United States to Australia, compare as follows:—

Year	Exports from U. S. to Australia	Imports into U. S. from Australia
1913 (†)	$ 43,351,855	$10,956,200
1921 (†)	120,985,720	31,461,017

NOTE:— (†) Fiscal years ending 30th June.

A large proportion of the goods supplied to Australia by the United States could have been supplied by Canada if the Australian British preferential tariff rates had been extended to Canada.

The Customs appraisement laws of Australia now stimulates importations from the United States, instead of from Canada. The Australian law applies ad valorem duties on values which are based upon the "home" market value of the goods in the country of export. The application of the Australian duty on

values based upon the home market price in the country of export results, as a rule, in the Australian duties being greater on goods made in Canada than on the like goods made in the United States. Let us illustrate: Because of revenue duties on materials of a clause or kind not obtainable in Canada, which must be imported by the Canadian automobile manufacturer, the "home" price on a Canadian-made car is higher than the United States "home" price on a similiar car. But the Canadian manufacturer, under the Customs drawback regulations, can sell his car for export at prices which approximate to the United States price. Thus a United States automobile, on importation into Australia, pays duty on the basis of the "home" selling price in the United States; and the same automobile made in Canada and shipped into Australia (although the export price based on drawback would compare favorably with the United States export price) would be valued for duty in Australia at the higher "home" selling price in Canada,—resulting in the payment of greater sums in duty than would be payable on the like car made in the United States.

Thus the Australian Customs valuation system, as a rule, in respect to manufactured articles, has the effect of opening its markets by tariff preference to foreign products to the detriment of Canadian products.

Canada obtains most of its dried fruits from the United States. We believe these and numerous other goods, which Australia may name, could be obtained in equal or better quality from Australia if the tariff were arranged to promote this inter-Empire trade. On the other hand, we could sell Australian goods which she now buys from the United States, such as lumber and fish products natural to this country. Examples of other oustanding products of this country which should have preference in Australia are agricultural implements, wood pulp, paper and paper products, pianos and organs, gramophones and records, therefor, automobiles, and bicycles, machine tools, air compressors, pumps and drills, textiles and products thereof, rubber goods, steel mill products, including cold drawn steel, fabricated structural steel, wrought iron and steel tubing, wire fencing, wood screws, carbide, cyanide, paints and varnish, aluminum products, enamelled ware, mechanics', woodsmen's and farm hand tools, silverware, watch cases, cutlery (table), proprietary preparations, confectionary, etc.

In March, 1920, the Australians introduced a new tariff in Parliament and brought the rates of duty into effect, and it was assented to December 16, 1921. This tariff vests the Commonwealth Government with powers similar to the powers vested in the Government of Canada, to negotiate British tariff preferences,—(Section 4 of the Tariff Act of Canada.)

The Canadian Manufacturers Association most earnestly urges its confident belief that the national advantage of Canada will be greatly promoted by the negotiation of an arrangement with Australia by which Australia will extend to Canadian products the same preferential rates which she extends to the products of the United Kingdom, conditional upon Commonwealth products being admitted into Canada at the lowest British Preferential tariff rates which may be extended by this Dominion to the products of any other British Dominion,—and subject also to arrangements, where necessary, for greater tariff preferences between the two countries on various important products natural to each country which it would be advantageous to exchange.

NOTE:—Exhibits submitted with this statement appear in Appendix 5.

PREFERENTIAL TARIFF AUSTRALIA AND CANADA

PART II.

(Presented by Canadian Pulp and Paper Association).

THE Canadian Pulp and Paper Association, representing practically 95% of the industry, respectfully represents.

1. That Canada exported to Australia in the years 1914-1922 newsprint paper in volume and value as follows:—

Fiscal Year	Tons	Value
1914	12,007	$ 454,183
1915	19,901	745,946
1916	23,498	866,315
1917	26,409	1,106,617
1918	31,222	1,835,207
1919	32,155	2,081,911
1920	32,173	2,288,994
1921	37,120	4,256,850
1922 (eight months)	14,819	1,492,139

and is at the present exporting an average of about 1800 tons a month to that country.

2. That in addition to newsprint, Canada normally exports to Australia other grades of paper, such as writing and wrapping papers, to a considerable extent, and that the value of such exports in 1920 amounted to $699,348, in 1921 to $1,671,262; and in the first eight months of the current fiscal year to $222,261.

3. That, by virtue of a tariff law recently enacted by the Parliament of the Commonwealth of Australia an import duty amounting to £3 per ton has been imposed upon newsprint paper entering that country except newsprint paper from the United Kingdom, which is admitted free;

4. That, by virtue of the tariff law before mentioned, papers other than newsprint, are admitted into Australia upon payment of a duty of 5% ad valorem if from the United Kingdom and of 15% if from any other country, including Canada;

5. That, the effects of this preference accorded to the paper manufacturers of the United Kingdom has been materially to reduce our exports of newsprint paper to that country and ultimately will be to exclude them altogether since a duty of £3 per ton makes it impossible for Canadian paper manufacturers to compete in price with those of the United Kingdom without sustaining a loss;

6. That the discrimination against other Canadian Papers, amounting to 10% ad valorem, has already reduced the volume of such exports and will eventually exclude such papers from the Australian market;

7. That throughout the period of the War and for some time subsequent thereto Australian consumers of newsprint were almostly entirely dependent upon Canada for their supplies and that during the greater part of this time Canadian paper mills supplied paper to Australia at a lower price than was obtainable in the open market, their object being to conserve a naturally contiguous and advantageous market;

8. That, in order to secure the preferential treat-

(Continued on page 90b)

Genuine and Substantial Increase in Industrial Activity in Canada reported by Members of C.M.A.

Many Canadian Manufacturers are increasing operations and finding business conditions distinctly on the up-grade.

IF any confidence can be placed in the accuracy of the law of average,— and there is no good reason for doubting its correctness,—it may be stated that there has been a distinct improvement in industrial conditions in Canada since the turn of the year. Nine out of ten members of the Canadian Manufacturers' Association, who have been asked to report on their own experience, declare that their business is looking up, that the outlook is more encouraging and that they are operating or intend to operate on a larger scale. Here and there a less cheerful note is sounded but, viewing the situation by and large, the great preponderance both of opinion and experience is that times are appreciably on the mend.

It would be impossible to secure a report from every Canadian manufacturer. One can only take a cross-section of the field and form an opinion of the whole from the experience of the part. So extensive and representative, however, are the numbers of those, whose views appear on this and the following pages, that it seems quite fair to base the foregoing conclusions on their reports. Practically every line of industry is covered and all sections of the country are included in the review.

No appology is offered for the extent to which quotations have been made. If there is strength in numbers, the testimony of so many manufacturers will go far towards the restoration of that confidence which is so much needed. For the benefit of those who will not care to read the reports in full, the more significant statements in each have been set in italic and a rapid glance over these will be quite enough to convince readers of the correctness of the general estimate.

What they are Saying

McCORD MANUFACTURING CO., WALKERVILLE:—"We are increasing operations 100 per cent. over 1920 and are adding 25 per cent. more help."

THE METALLIC ROOFING CO. OF CANADA, LIMITED, TORONTO:—"Twenty-five per cent. more orders in January, 1922, than in January, 1921."

SAWYER-MASSEY CO., LIMITED, HAMILTON:—"We started operations on a more aggressive scale on the third of January, putting on one hundred and fifty additional hands."

MONARCH METAL CO., HAMILTON:—"We are increasing operations and output, taking on more hands and booking satisfactory orders."

PLUMMER BROS., BOLTON:—"Our business is in good shape and *the prospects for 1922 are very encouraging*, considering business in general in our line."

POLLARD MANUFACTURING CO., LIMITED, NIAGARA FALLS:—"We are running our full crew full time and have considerable business ahead."

CANADIAN LIBBEY-OWENS SHEET GLASS CO. LIMITED, TORONTO:—"We commenced operating our Hamilton plant about two months ago and are working at full capacity. From business in hand *we shall be operating at full capacity this year*, ours being a continuous night and day operation."

THE ROYAL PAPER BOX CO., QUEBEC:—"We are preparing to increase operations and output, have put in some new machinery and are taking steps to enlarge storage capacity."

BAUER & BLACK, LIMITED, TORONTO:—"We have added four thousand feet of factory space and increased our advertising appropriation for 1922."

CANADIAN PRODUCTS DIVISION OF GENERAL MOTORS OF CANADA, LIMITED, WALKERVILLE:—"We are operating full time, employing 830 people. At these plants are manufactured motors and axles for the McLaughlin, Chevrolet and Olds Divisions of General Motors of Canada at Oshawa. This activity is largely caused by the *world-wide export business* in motor cars now being handled by General Motors of Canada."

Electrical Apparatus in Big Demand

Here is what the Packard Electric Co., Limited, St. Catharines, have to say about the state of their business,—

"We received more orders for January than for any other January in the history of the Company and we are now positive that our February business will exceed any other February's business. We believe this year will be a banner year. January and February are usually very slow months and, if orders come in plentifully in these two months, the rest of the year should certainly take care of itself. Furthermore, enquiries for our goods during the past few months have been exceedingly heavy. We were pessimistic during 1921 but we are now exceedingly optimistic and are looking forward to a very bright future."

THE G. WALTER GREEN CO., LIMITED, PETERBOROUGH:—"We are increasing operations and output slightly."

GLASSCO LIMITED, OAKVILLE:—"We have been *running full time* since February 1st, 1921 and worked overtime during the summer of 1921. We are doing some export business but mostly Canadian orders."

THE INGERSOLL PACKING CO., LIMITED, INGERSOLL:—"Our operations are about as usual for this time of the year."

A. E. REA, TORONTO:—"Business at our factory is good. Orders are coming in faster and better than ever before."

C. A. DUNHAM CO., LIMITED, TORONTO:—"Beginning January 2nd, we resumed full time manufacturing of 50 hours per week and with about 75% of full staff."

PERFECT MACHINE CO., LIMITED, GALT:—"Business is fairly good, at least 100 per cent. better than the winter of 1920-21. Our foundry has been busy all this winter and orders on hand are sufficient for possibly another month."

S. NELSON COMPANY, LIMITED, VANCOUVER:—"Business small; orders hard to get; prices firm; starting out better than 1921."

THE DONNACONA PAPER CO., LTD., DONNACONA, QUE.:—"We are not making any additions or extensions during the present year. Our business is normal."

Take on More Hands

C. A. MOSES, OSGOODE STATION, ONT.:—"Outlook is brightening very much. We have enlarged the plant, put in more machinery and are taking on more hands in order to increase output. We have taken on a heavier stock than ever."

E. D. SMITH & SON, LIMITED, WINONA:—"Jam business is depressed but getting near the end of manufactured stock on hand. Prices, however, in many cases, are below replacement cost."

THE M. F. BEACH CO., LIMITED, WINCHESTER, ONT.:—"Considering industrial conditions *we have a fair trade*. Some of our lines are up to normal and some not."

C. H. COCHRANE & CO., LIMITED, OTTAWA:—"We are increasing our output and are arranging to build an entirely new plant."

JOHN M. LALOR & CO., TORONTO:—"Business is better."

L. S. BARRAND, PEMBROKE, ONT.:—"Prospects look good for the near future but just now (Jan. 28) we are very slack."

S. VESSOT & CO., JOLIETTE, P. Q.:—"Business with us has never been so small as it has been for the past six months, but we hope for better things soon."

MARSH ENGINEERING WORKS LIMITED, BELLEVILLE:—"There is nothing very encouraging to report at present. There are lots of inquiries but few orders."

THE CANADIAN RATTAN CHAIR CO., LTD., VICTORIAVILLE, QUE.:—"According to the information obtained from our travellers, business in our line will be very good this spring."

Running to Capacity

HUMBERSTONE SHOE CO., LIMITED, HUMBERSTONE, ONT.:—"We are running full time and to capacity; have added two thousand square feet floor space, and have enough business to last us the next three months."

AMERICAN LA FRANCE FIRE ENGINE CO., OF CANADA, LTD., TORONTO:—"Working full time. Prospects for 1922 very favorable. More business in sight, than any time in the past five years."

PARISIAN CORSET MFG. CO., LIMITED, QUEBEC:—"Conditions are rapidly improving, though collections are not too encouraging, particularly in the West. We are working (Jan. 28) at 75 per cent. capacity and *expect to augment to 90 per cent.* within a fortnight, our capacity being 6000 pairs per day. We have added 34 new machines recently and have only lately completed a new addition to our factory giving about 20,000 square feet additional floor space."

BEVERIDGE SUPPLY CO., LIMITED, MONTREAL:—"We are banking on things improving as spring advances and are putting new men out so as to cover thoroughly from Kingston to Sydney. We are also maintaining our trade paper and direct advertising."

AMERICAN BROOM WORKS, ST. BASIL DE PORTNEUF, QUE.:—"Owing to higher prices on broom corn, jobbers are placing future orders anticipating better prices on brooms. *We will have to increase our capacity* for spring delivery on brooms and mops. Our labor is at pre-war figures."

Full Staff, Five Days

THE BOWMANVILLE FOUNDRY CO., LIMITED, BOWMANVILLE:—"We are running full staff in our foundry and five days a week, instead of half staff half time. We have booked several good orders which will run along for a considerable period."

THE D. MOORE COMPANY, LIMITED, HAMILTON:—"Business is very bad indeed but we anticipate a strong come-back for the second half of the year, which should bring about a considerable increase in tonnage for 1922."

THE ONTARIO PAPER CO., LIMITED, THOROLD:—"We are running full and expect to continue to do so. We are not putting on any more help; on the contrary, we are reducing our forces somewhat, though not our product, as we are getting greater efficiency from the men."

THE VOLTA MANUFACTURING CO., LIMITED, WELLAND:—"At the present time (Jan. 26) we see little improvement in general business conditions so far as our line of industry is concerned. We have, from time to time, numerous requests for quotations but the tendency seems to be to hold off placing orders for the present at least."

THE STEEL TROUGH & MACHINE CO., LIMITED, TWEED, ONT.:—"We are increasing operations and output steadily. We are taking on more hands; increased 20% since January 1st. Business is coming slowly but surely. We are adding some new machinery and late last fall built foundation for extension of factory to be completed this spring."

HOWARD SMITH PAPER MILLS LIMITED, MONTREAL:—"The situation in Canada so far as we are concerned is very much improved and *stocks of merchandise on hand are very low.* People are beginning to realize the world is not coming to an end and that advertising is a necessity, with a consequently increased demand for papers on which to advertise."

Fully Employed All Year

THE C. TURNBULL CO. OF GALT LIMITED, GALT:—"We have a full staff working. Our travellers are now out and orders being taken are about the same as 1921. These, we expect will keep us fully employed this year."

TOWER CANADIAN LIMITED, TORONTO:—"We are preparing for increased spring business and *have increased our staff* about 10 per cent. We expect to book some very interesting orders in the near future."

CARGILL LIMITED, CARGILL, ONT.:—"It is difficult to tell you anything of an encouraging nature. The past year was a bad one and business continues very quiet, though now being the quiet season, probably this is not to be wondered at. We are not increasing operations or output, rather curtailing."

THERMOS BOTTLE COMPANY, LIMITED, TORONTO:—"Orders received for January were 40 per cent. greater than for January 1921. Western business is showing a lot better than last year and the jobbing trade has become more optimistic during the last 60 days. *We have placed orders for larger quantities of goods, parts, etc., Made-in-Canada than in any previous year of our experience.*"

CHILDREN'S WEAR LIMITED, TORONTO:—"Operations and output increasing over that of same period last year. Orders also show an increase and we have increased factory space. The only shadow on the picture is tight money. Accounts are proving slow and hard to collect."

P. B. YATES MACHINE CO., LIMITED, HAMILTON:—"We cannot see any change in our business yet for the better. It is perhaps a little early to pass an opinion as to spring opening in our line."

THE CROSS FERTILIZER COMPANY, LIMITED, SYDNEY, N. S.:—"Our plant has been shut down for a month and our warehouse is full of goods which the farmers will not buy. They do not actually need fertilizers before April and May and they are holding off, looking for lower prices though substantial reductions have already been made. With regard to our plant at Welland, which is now ready to start up, we are having the same experience there. One thing that is certainly operating very much against business is the high rates of freight prevailing. We are certainly having a rough time but nevertheless we think the worst is over, and while we do not look for much improvement in 1922, we believe we will see things better in 1923."

Large Canadian Organ Ordered for France

One of the most interesting export orders yet received by a Canadian manufacturer was recently booked by Casavant Freres Limitee, St. Hyacinthe, P. Q. It was for an organ to be installed in Paris, France, next September, and is important in that it is for the first instrument of the kind to be shipped from this continent to Europe. The organ has three manuals, 40 stops and over 3000 pipes. The company are naturally very proud of this order and consider that they have secured it on account of the quality of their product.

BOSTON BLACKING CO., MONTREAL:—"1921 was the largest year, with but one exception (1919), since we became established in Canada, thirteen years ago, and this year (1922) bids fair to outdo last year. *We are running full capacity* in all three factories and we find that there is plenty of business if we go after it."

WESTERN CORRUGATED CULVERT CO., SASKATOON:—"Our local trade, the rural municipalities, depend on tax payments for their revenue and we estimate local business at two-thirds of 1921 volume. Railroad business and government road building is prosperous-looking."

HENRY RUSTAD, WINNIPEG:—"The farm implement business has been dead for nearly two years and until the farmers get in a position so that they can pay for farm implements, it would not be wise to manufacture any more. We shut down several months ago on that account and will not open until conditions change."

DENNIS ADVERTISING SIGNS LIMITED, MONTREAL:—"Business is very encouraging with us and we look for a very good year. We have just added a new department to our plant which has increased our staff. Since the beginning of the year we have secured three (3) large orders for electric signs which amount to nearly $13,000.00 and we have on hand several large prospects which we expect to close shortly."

CHESLEY ARTIFICIAL LIMB COMPANY, LIMITED, HANTSPORT, N. S.:—"The year just ended was the most trying of our fifteen year's experience. This was due to lack of ready money among our prospective customers. Rather than reduce our staff, we accepted contracts with time payments, some of three years. We think that times are due to brighten up and we would not be surprised to have our busiest times ahead."

Great Improvement

THE NORTH AMERICAN FURNITURE CO., LTD., OWEN SOUND:—"Orders booked at the January Furniture exhibition, Toronto were satisfactory and showed a great improvement over 1921, not only in volume, but in the character of the business secured."

CARRALL BROS., SHERKSTONE, ONT.:—"It is too early in the season to say definitely what the outlook for this year will be as far as our business is concerned, but at present the *outlook is more favorable than 1921.* We always have reserve units, so our output can be doubled at short notice."

A. & C. BOEHMER, LIMITED, KITCHENER:—"Conditions generally are better than last year at this time. For instance, we worked 3½ to 4 days per week in January, 1921, and now we run from 4 to 5 days. We feel quite optimistic concerning the coming year."

BRUCE STEWART & CO., LIMITED, CHARLOTTETOWN, P. E. I.:—"Our plant is not operating at present (Jan. 28), on account of business depression. We have hopes that conditions will brighten up soon and that we will be able to open up again full force. We are expecting a good business from fishermen who require gasoline engines for their fishing boats."

BAZAN BAY BRICK & TILE CO., LIMITED, SIDNEY, B. C.:—"Our output last year was 20 thousand brick per day and, as we are completely sold out now (Feb.2) *we have decided to double our capacity,* making 40 thousand per day if we can, as we think by the inquiries we have had that we will be justified in doing so."

RIVERSIDE IRON WORKS, LIMITED, CALGARY:—"This is our quiet season (Feb. 1st.) and work is very slack with us at the present time, although *the prospects look very favorable for a good year's business.* We are not taking on any men at the present time; in fact, we have been laying off men since the beginning of the year, but we expect to take on more in the near future."

Larger Volume than 1921

THE OWEN SOUND CHAIR CO., LIMITED, OWEN SOUND:—"Satisfactory business was booked at the Toronto Furniture exhibition. and the company looks forward to 1922 with confidence that it will produce a greater volume of business than 1921."

MCCASKEY SYSTEMS, LIMITED, GALT:—"We are pleased to report quite a good year for 1921. We put in a new press during the year and have another one on order which is in course of erection. (Made-in-Canada). We are very optimistic for the future."

THE GURNEY FOUNDRY CO., TORONTO:—"Both our plants got started promptly with a good staff. We are now speeding them up further and *expect a satisfactory volume of business* under the steadily improving business conditions."

THE V. D. L. RUBBER CORPORATION, LIMITED, TORONTO:—"We are increasing output to a point 60 per cent. higher than ever before and have taken on approximately 30 per cent. more help during the past six weeks. *Export business is increasing* and we are making new connections in countries where we were not heretofore represented. We have just finished installation of new machinery."

ATLAS ASBESTOS CO., MONTREAL:—"We still find demand very slow and no apparent prospect of any nearby improvement but we believe by, say, May, our customers will be so bare of stock that they will be compelled to buy in some volume."

THE ENTERPRISE FOUNDRY CO., LIMITED, SACKVILLE, N. B.:—"Our main plant is running full time with about an 80 per cent. crew. This applies to our foundry department as well as to all others."

THE PEDLAR PEOPLE, LIMITED, OSHAWA:—"We feel fairly optimistic as to this year's business. In so far as the making of auto bodies is concerned, *we never were so busy*. We have considerably more men working for us than we had a year ago."

J. M. SCHNEIDER & SONS, LIMITED, KITCHENER:—"During the past six months we have been running capacity production, an increase of from 30 to 50 per cent. over same period last year. We are keeping our old staff busy and working about 55 hours weekly. *1922 has started off in good style* and we are planning for a busy year of expansion."

THE CARLTON PUBLISHING COMPANY, TORONTO:—"Our turnover for 1921 showed a very substantial increase over 1920, though profits were not proportionally as good. Sales for the new year equal last year's but are more difficult to get. *We are increasing our operations and output* and are employing more people than we did the same time last year."

Enlarging Capacity

TORONTO VINEGAR WORKS, LIMITED, TORONTO:—"We have just completed extensive alterations to our plant and have added an up-to-date loading device also an automatic painting gun to our equipment. At present we are installing a new bottling unit in our malt vinegar department. *We look forward to a big year.*"

THE WALTHAUSEN HAT CORP., LIMITED, BROCKVILLE:—"Our factory has been *working up to full capacity* since April 1st, 1921, and we have been obliged to refuse export business as we cannot get out our domestic orders on time. We need a plant as large again as the present one, but can do nothing along this line until money gets easier."

MERRITT & CO., LIMITED, CHATHAM:—"Business has improved considerably with us in the last week or two (January 27) and we are looking forward to a rather busy spring and early summer. We have taken on new hands and have been running normal time this last week."

HERALD PRESS, LIMITED, MONTREAL:—"The present condition of business is most encouraging. To be sure we are not rushed with work but there seems to be a steady improvement in almost every line. The strike in the printers' trade is not greatly affecting us; we could work to a little better advantage with a few more compositors, but our shortage is no great handicap."

CORRUGATED PAPER MFGRS., HAMILTON:—"My output this year to date has exceeded that of last year and have orders booked ahead for two months. *I am running full time with a full staff.* At present I am building new machinery and expect to enlarge my plant during the summer months."

No Hard Times Around This Factory

By O. J. Mitchell
Mitchell & Co., Ingersoll

I AM glad to see that you are taking up a campaign against the cry of hard times. If we want hard times, all we need to do is cry hard times and they will sure come. Now as for myself, I could'nt very well cry hard times when we are real busy. I have a lot of customers who think prices of my product must come down, but I manage to convince them that they must go up, and not down, and I can easily explain. I am paying my men the same as war time prices. I didn't pay the very highest prices when the war was on, but I haven't cut my men one dollar and we work full time, with Saturday afternoon off.

I have orders to keep me to midsummer and expect I can get more orders before these are all filled. I would increase my business if I had room or had room to build but I haven't and must content myself with what we have and do all we can under the circumstances. I have every available space taken up and can't do more.

We worked steady the last two years, never a slack moment, and we have been steady all winter and now is the time we take our orders so that I can't see any thing but another busy year. It perhaps is only fair to say that I have what the parties want, but here is one thing I do. I was 72 years old on the 28th day of February and of course I am a young man and I don't sit down and wait. I take some good trips and I believe it keeps me on my feet and keeps me in touch with conditions outside of my own narrow business.

I went out last week, gone three days, fetched home orders for $3,200 worth of business, and found everyone glad to see me, and of course, they won't believe that I am 72 years old, but old or young I get the orders when I go after them and I find it makes my traveller sit up and take notice. He can't hand me anything about hard times. I know all he knows, and, for a young lad like me, sometimes I believe I know more. I take the trouble to find out.

Now, I didn't finish that trip. It was 22 to 30 below zero and, although very young, I caught a bad cold and of course, got a trifle used up and came home. Now, I really believe had I not caught that cold, I could have closed as much more, but I find one must feel well to be at his best and I came home. But don't make any mistake. I am going back after them orders if the Lord lets me live long enough.

The writer has his mind on a young man, a trifle over half my age. He sits in his office, smokes until he is black in the face and depends on his travellers who are selling on commission. The goods are too dear, the travellers tell him so, but he tries to argue the travellers out of it. They carry several lines and sell those that are the best value and keep the others to offer where they get a customer that don't know. If this gent would chase himself out and find out the conditions, he would know where he is at. *I think all manufacturers should take a trip: it puts them wise and keeps them on their feet and on their feed.*

WATERVILLE VENEER & PANEL CO., LTD., WATERVILLE, QUE.:—"At the present time we are reorganizing our plant and expect to reopen shortly on a large scale, and are looking forward to the future with great optimism. Our plant is the largest veneer and panel plant in Canada, and is equipped with all new and the most modern machinery procurable for the manufacture of veneers."

W. E. WOELFLE SHOE CO., LIMITED, KITCHENER:—"Worked full time all of 1921, increasing output during last six months, this year being the largest in our history. *1922 so far has kept us busy* with a daily output that represents the peak of our productions but, as the buying is largely for immediate needs, we have no assurance as to the length of time this will last but feel that we can depend on equalling our 1921 volume."

ONTARIO SEWER PIPE & CLAY PRODUCTS, LTD., MIMICO, ONT.:—"We are entering upon 1922 business with the largest stock of finished product in our yard in our history but we have such encouraging reports from all over the province that *we are going right ahead with manufacturing.* Built one new kiln in 1921. Have already started on another one. Have increased our capacity 40% over what it was in 1920 and expect to sell our output."

CONNORS BROS., LIMITED, BLACKS' HARBOR, N. B.:—"If railroad rates were to be reduced one-half, we might get our pre-war orders for Western Canada back and get more business than ever. At present our Western Canada business has fallen off to about one-half of what it was in 1913 and 1914, customers advising us that they are buying foreign goods until we reduce prices at western points. We cannot employ more help in our plant until railroad rates come down."

BRODEY-DRAIMIN & CO., TORONTO:—"Prices today for raw furs are from 10% to 25% higher than the same time last year. There is a shortage of manufactured furs throughout Canada, and most furriers have had a very good season, with good prospects for next season, outside of the Northwest."

Business Never Better

THE NONSUCH MFG., CO., LIMITED, TORONTO:—"Business, as far as this concern goes, has never been better. Collections are fairly good and sales are excellent. Last year was the largest this company ever had. *We are at present running at full time* and we expect to enlarge our plant and put in new machinery at once."

LA PARISIENNE SHOE CO., LIMITED, MONTREAL:—"We have built an extension to our factory last fall 45 feet by 75 feet, four storeys; this was made more to accomodate than to increase our output, but we are looking forward with confidence and we expect to be as busy this yea as we have been last year."

CANADA CYCLE & MOTOR CO., LIMITED, WESTON, ONT.:—"We have nearly double the staff that we had during the last eight months of 1921. Our manufacturing programme is much increased over that of last year, largely on the strength of the fact that dealer's stocks of both bicycles and skates are much lower than a year ago."

PREMIER TIRE & RUBBER CO., LIMITED, TORONTO:—"We have only got started manufacturing in August last and find conditions fair. *Our spring orders to hand are quite satisfactory*, but we feel that we are too young to make a very definite forecast as to the future."

JULIUS KAYSER & COMPANY, LIMITED, SHERBROOKE:—"We are increasing our operations and output in all departments. We are taking on more employees and installing new equipment throughout our plant. The reason

for this cannot be attributed to the Canadian demand; it is due, to a considerable extent, to having solicited export business."

CANADIAN SUMNER IRON WORKS, LIMITED, VANCOUVER: — "Our output during the months of November, December, and January has shown an increase of 50 per cent. over the corresponding months of the previous year, necessitating addition of approximately 35 per cent. more help. Our plant is being operated to full capacity with three shifts of eight hours each. Our manufacture consists solely of saw and shingle mill equipment and, with the exception of one 14-machine shingle mill, which is completed, all work in progress at the moment is for extensions and new equipment in replacement of old and inefficient machinery."

LITHOGRAPHING AND PRINTING CO., MONTREAL:—"Since January 1st, 1922 we have found business improving steadily, with prices more or less a secondary consideration. While we have not been receiving any large orders, still we are very well pleased to note an improvement and we have been able to give work to a few more men."

A 50 per cent. Increase

THE CHARLES E. HIRES CO., LIMITED, TORONTO:—"Although the winter months are usually quiet in our business, we believe that the coming season will be a good one. In order to take care of the orders already booked we have had to increase the capacity of our plant, and *expect a 50% increase in business* during the next few months."

H. C. BOULTER CO., LIMITED, TORONTO:—"During the last three weeks (Jan. 25) there has been *a marked improvement in sales* of ready-to-wear. The elimination of so many manufacturers who were forced to dispose of stocks October, November and December at absurd prices and who eventually assigned as a consequence, will steady the market and reestablish confidence, not only amongst the retail trade but with the general public."

DOMINION ENVELOPE & CARTONS, LIMITED, TORONTO:—"Would advise that our business this month (January) so far has been good. Since last September we have been receiving a lot of new machinery for our carton factory and we have now double the capacity that we had prior to September 1921. We are also building in our own factory new machinery for our envelope department."

THE TORONTO PHARMACAL CO., LIMITED, TORONTO:—"Although we are working with a diminished staff, as compared to a year ago, we are producing and shipping more goods and are slightly increasing the number of our employees. *Orders are coming in very satisfactorily* and our collections are also satisfactory."

NICHOLSON & BROCK, TORONTO:—"Our sales for last year, were the largest we ever had—and the new year has opened very encouragingly, for our *orders to date are ahead of last year*. We have entered into a contract to advertise more than ever. We are going to spend $4,000 in advertising on bird seed, which is our only line, and are looking with hope and confidence to a banner year. We think this is the time to advertise."

Increasing Staff

THE MOULTON MANUFACTURING CO., LIMITED, MONTREAL:—"We have taken on about 15 per cent. more help, increased our output 35 per cent. for the last two months (December and January) and *are looking forward to a much larger volume of business*. We have bought some new machinery and intend to buy more in the next two months."

S. SHORE CANDY FACTORY, WINNIPEG:—"*We are working full time* and have done so ever since August of last year. We have taken on a few more hands since the first of this year. Orders are coming in fairly well, but as prices of raw material are unsettled, no large orders are being sent in. We had the largest sales last year since we started the manufacture of candy."

METAL CRAFT COMPANY LIMITED, GRIMSBY:—"Ours is a small business, in the building process, although we have been going seven years. Business has been very steady for the last three years,—no big business but many orders from a large area. In 1921 our increase in sales over 1920 was 20 per cent. At present (Feb. 2) *we are taking on hands and are utilizing space not previously used.*"

SHURLY & DERRETT, LIMITED, TORONTO:—"while there is a "no market" condition (by which we mean, absolutely no stable price for our product), *from inquiries and orders actually booked, conditions are in this and other respects improving.* We are not increasing operations or output at present (Feb. 2), though we have slightly increased operations temporarily the past couple of weeks. No orders of any particular moment are being received, though business has been better and we have had more inquiries of late."

STARR COMPANY OF CANADA, LIMITED, LONDON:—"We are pleased to report a decided improvement in the wholesale trade in our particular line. Orders for the past two weeks (Jan. 28) have shown a very satisfactory improvement. Business is picking up both in phonographs and records and dealers are sending in orders more freely and for very much larger amounts. We have increased our sales organization by two or three travellers and now have some 12 or 15 wholesale men on the road, so that we cover Canada very thoroughly."

MACLEOD PULP & PAPER CO., LTD., LIVERPOOL, N. S.:—"We are running our mills *at full capacity*, but our logging operations for this season are practically nil. Next summer, however, we are in hopes that we can also have this end of our business in full swing."

Sales are Away Ahead

INTERNATIONAL BUSINESS MACHINES CO., LTD., TORONTO:—"Our sales for time recorder equipment in January, equalled the previous three months. Our sales for Dayton scales in January, show *an increase of 21% over same month last year*. Our leases of Hollerith tabulating and sorting machines show an increase of 11%, cards sold for this equipment show an increase of 125%."

THE SUPERHEATER CO., LIMITED, MONTREAL:—"Until there is a marked improvement in the railway situation, we will not be better off from a business standpoint. In the meantime, while we are not increasing expenditures or adding to the number of employees, we are making no further reductions."

DIAMOND STATE FIBRE CO., OF CANADA, LTD., TORONTO:—"Our Toronto specialty department is now running full time after being on a four-day basis for a period of about a month. We have not received any large outstanding orders. However, the *general orders have increased considerably*, which is really more encouraging than if our business were coming from one or two sources."

BRANTFORD ROOFING CO., LIMITED, BRANTFORD:—"At the present time our business is very quiet owing to weather conditions, but it is *quite equal to similar months in either 1918 or 1919*. We are anticipating running fairly steady throughout the winter. We also have some improvements to our plant under way."

THE T. SISMAN SHOE CO., LIMITED, AURORA, ONT.:—"Business is exceptionally good with us, which we cannot account for except from the fact that our product must be giving satisfaction. We are turning out eleven hundred pair of shoes per day. We have made an addition to our factory and opened a branch fitting room in Newmarket."

THE AERO MFG., CO., LIMITED, LENNOXVILLE, P. Q.:—"We have, on the assumption that conditions will improve shortly, bought raw material to cover our wants for the next quarter, which is contrary to our procedure in 1921, when we only filled our wants for immediate consumption. So far (Jan. 28) business has been exceedingly erratic, unexpected volume for short periods and unexpected lack of business for the balance."

RIDOUT & MAYBEE, TORONTO:—"We are pleased to report that last year there was greater activity in patents of invention and trade mark registration than in any previous year in the history of Canada. This was reflected in our own practice which showed about 25% increase in patent and trade mark applications over the previous year, which in turn showed a 25% increase over the year 1919. We quite expect the activity of the past year will be maintained in 1922."

No Evidence of Depression

THE CROMPTON CORSET CO., LIMITED, TORONTO:—"We cannot report any decided change in the condition of our business lately as *we have been running to capacity* without any evidence of any depression whatever, and expect to maintain this condition for some time yet. We haven't, however, increased any, although business has been exceptionally good with us."

CORNELL KNITTING CO., LTD., PETERBOROUGH: — "Orders booked for several months ahead. Have added to our plant since September, four circular machines and the same in sewing machines: we are employing more help. The writer took a trip east the end of November and beginning of December two weeks securing $20,000, in orders for immediate and future delivery."

THE SPIRELLA COMPANY OF CANADA, LTD., NIAGARA FALLS, ONT.:—"The only information we can give on our business for 1922 is that last year we made a 25% increase. Our plans this year are to hold this increase and to further enlarge on it. Although January has been slow in starting, we sincerely *believe our business this year will be better than last year*, from the viewpoint of number of articles sold. As far as our operators are concerned, we have not found it necessary to make any lay-off nor have we decreased our piece work rates."

CHESNUT CANOE CO., LIMITED, FREDERICTON, N. B.:—"The most encouraging thing about our business at the present time is that we are daily *getting many orders and inquiries*. We are planning, when we rebuild in the spring, to increase our output very materially taking on more hands and adding new machinery and enlarging our plant to double the capacity of the one destroyed by fire in December last. Prospects to us look exceedingly good for 1922."

Back to 50 Hours

THE PRESTON WOODWORKING MACHINERY CO., LIMITED, PRESTON:—"In our line business has shown considerable improvement. Since the end of the year *prospects for the future look fairly encouraging* and we look forward to having an ordinarily normal year—not big—but nothing to complain about. We are not taking on any more hands just now but have about 60 per cent. of our ordinary number, working 44 hours a week, and hope to get back on 50 hours very shortly now."

DUSTBANE MFG., CO., LTD., OTTAWA:—"Our sales for January this year show *an increase of 20% over January last year.* We are employing more men this year than we did last year. Hard times are pretty much a state of mind, and there appears to have settled over the country a wet blanket of depression, and while there are a lot of people out of work, the fact remains that 95% of the people who have always worked are working at the present time."

AVICO FOOD PRODUCTS LIMITED, WINNIPEG:—"We are increasing our output, are working to full capacity and are adding to our machinery. Business is encouraging as far as we are concerned. Although we have not booked any more business at present than we had last year at this time, *we have good business in sight* and we feel we will sell our increased output. In our opinion better times are coming although we will not feel the effects of them until the middle of the summer, when crop prospects are in sight."

THE RICHARDSON SYSTEMS, LIMITED, WINNIPEG:—"Our business, being mostly with the grain and financial interests, has shown encouraging increases. We regard the fact that financial companies are now purchasing new and renewing stocks of old forms (in the way of loose leaf and bound books) as indicative of a larger volume in their business. Our sales for 1920 were 50% higher than in 1919 and our sales for 1921 were 10% higher than 1920. Our sales have not as yet reached 1912-1913 level but are very close to them. *Our confidence, even with all the calamities which have befallen our crop etc., is not shaken* in the non-stoppable prosperity of this Western country."

THE GALT KNITTING CO., LTD., GALT:—"We find the retail trade throughout Canada very slow in buying and we do not look for much general business before March. Money is very tight with these people and payments very bad. We believe they want to clean up as much as possible before placing orders. The large departmental stores have largely placed their orders which are very satisfactory. Competition is keen, very keen, and prices are down to rock bottom."

J. R. MOODIE & SONS, LIMITED, HAMILTON:—"We find the wholesale trade to be very backward about placing orders for Fall 1922. We have been showing samples since December 1st, and while some of the wholesale houses have bought, others show a lack of interest in placing orders. We are endeavoring to keep our mills in operation, but to do this we have to run largely on speculation orders. We feel that business on underwear will be good before the year is over, but many of the buyers in the trade today lack courage to place orders ahead as they did a few years ago."

Breaking All Records

THE BRANTFORD CORDAGE CO., LIMITED, BRANTFORD:—"We have experienced no slackening whatever in the demand for Brantford twines, and have been operating our mills continuously ten hours per day and fifty-nine hours per week regular time. Owing to plenty of power and labour our production since Sept. 1st, for the season of 1922 breaks all previous records, and *our total production now promises to exceed that of any previous year in our history.* We have at the present time the largest number of employees on our pay roll we have ever had. Our mills at the present time are working on export orders for Ireland and Algiers and we have comparatively large orders from other markets. During the past year we have added a number of new machines and devices with a view of increasing our production and perfecting our quality. We have now got our No. 1 and No. 2 mills up to the maximum production, and in view of the increasing demand for our products, we have an entirely new mill, storage warehouses and general equipment under serious consideration at the present time. Our capacity at the present time gives us the position of the largest manufacturers of binder twine in the British Empire."

WILSON BOX CO., LTD., ST. JOHN, N. B.:—"While 1921 has been rather slow in the wooden box business, owing to the depression in trade generally, we have been able to pull through without laying off any of our hands and we have taken advantage of the situation to tune up our box factory. We are at present engaged in adding some new machinery so that when business begins to come in greater volume—particularly with regard to a greater export business with the British West Indies which at present is engaging a good deal of our attention—we will be ready to handle it. We feel that *business has now hit the up-grade* and that while there may be nothing spectacular, the improvement will be steady."

ANDREWS WIRE WORKS OF CANADA, LIMITED, WATFORD, ONT.:—"Business is showing much improvement since January 1st, and about two-thirds of our equipment is working full time now. We do not expect to have to take on much extra help, however, for we kept the shop running through the slack months and have accumulated a good stock of manufactured goods from which we are now filling orders. We anticipate our Western business this year will be below normal but that our business in Ontario and

NEW INDUSTRIAL PLANTS



Plant of Scottish Fertilizers, Limited, at Welland, Ont.

THIS view shows first unit of plant in course of erection. It is 160 x 160 feet, 65 feet high, all steel construction, with sides and roof of Robertson's asbestos protected metal and footings and floors of reinforced concrete. All machinery is of special design fully enclosed to eliminate dust and with capacity of twenty tons of finished fertilizers per hour, bagged and loaded on cars for shipment. Electric power is used throughout. The plant stands on a 13-acre site, bordering on the Welland Ship Canal and with Grand Trunk siding, from which interswitching with six other railroads is possible. This affords ideal facilities for handling both raw materials and finished product. Total cost of building and equipment will be about $200,000.

Scottish Fertilizers Limited are associated with Alexander Cross & Sons Limited, Glasgow, London and Liverpool and with the Cross Fertilizer Co., Limited, Sydney, N. S. C. R. Walker, Sydney, N. S. is president and A. L. Smith, formerly of Kingston, managing director. The plant was designed by the company's technical manager from Glasgow, Charles Davidson, F.C.S., F.F.S., M.S.C.I., F.A.C.S.

Eastern provinces will be *as good or better than any previous year.* Merchants' stocks generally are reported low and prices on wire goods are quite reasonable compared with other products."

ABBOTSFORD LUMBER, MINING & DEVELOPMENT CO., LIMITED, ABBOTSFORD, B. C.:—"Enquiries are more numerous than t opening of any season for several years, and, when freight rates ar reduced, we look for a good volume of business. We are now shut down on account of cold spell and lake being frozen over but have plenty orders ahead to start on when weather eases up which we hope will not be later than F bruary 15th: *We expect to increase our output over last year* and employ at least an equal number of men. Our stock is much lower than last year and with orders now on hand this will keep us busy for the next three months."

Adding New Hands

CANADIAN POSTUM CEREAL CO., LIMITED, TORONTO:—"We are very optimistic about the future. It looks to us like a pretty fair 1922. We are getting ready for this. Have made some changes in our plant which will increase our operation and are taking on additional people. While we have added new machinery, we have not added any more buildings. In addition to this, we have recently moved the head office of this company to Toronto where all of our business will be transacted in future."

VETCRAFT SHOPS, TORONTO:—"We are under the Dept. of S. C. R. and all our men are disabled war veterans who are otherwise unemployable. We have been in existence a little over a year and under good management have made splendid progress. We manufacture wooden toys, articles of hand-hammered copper and brass, also certain lines of reed work. Last year we could not supply the local demand for our products and the *prospects for this year are very encouraging.* We feel sure of getting a fair share of business. We have recently secured a new factory in Toronto, (making three in all) two in Toronto and one in Hamilton. This gives us more adequate space and improved facilities for taking care of more than double the business. This year we hope to increase our output at least 100%."

HULL IRON & STEEL FOUNDRIES, LIMITED, HULL, QUE.:—"Whilst orders are rather slow, more enquiries reached us in January than any month previous back to September. Output is not increasing nor are we taking on additional help, but we anticipate doing so in the near future, due to the lively interest in our patented heat-resisting locomotive grate bars, which are bringing enquiries from all parts of the U. S. A. Indications are that it will be necessary to add to our equipment to take care of the demand which is bound to accrue. We have already booked substantial orders with leading railways, who after putting them to severe tests, have adopted them as standard and the results encourage us to take a very optimistic view of the future."

Improvement by Fall

SOUTHERLAND, INNES CO., LIMITED, CHATHAM:—"At the present time our business of course is very quiet, as it always is at this season of the year. But even for this season, it is a great deal quieter than it usually is. We cannot tell as yet how the spring will open up, but we are in hopes there will be a considerable improvement, on last fall. We are stocking our mills up lightly, as we had heavy stocks of manufactured material carried over from last year. With prices about 50% lower than they were a year ago, we should think that business would be stimulated, and that there would be a good trade in the spring. The export market, which has been almost dead for twelve months, we are in hopes will open up, as stocks in the hands of the consumers are light. Until things are settled in Europe, however, there will not be much Baltic business, and the Baltic ports were large consumers of our goods. We are trying our best to be optimistic, and can only hope that things are on the upward trend."

D. M. BEST & CO., TORONTO, ONT.:—"For the past three months (Jan. 26) business has been fairly good with us, and for several weeks part of our staff were working overtime. This we attribute principally to the holiday trade and a few export orders we received a couple of months ago. At the present time we have our pre-war staff working. During last summer we moved into our new premises at 520 King St., West, which gives us nearly double th space we previously had at 455 King St., West. We are now in splendid position to handle our Canadian trade as well as export business which we hope will enlarge very much in the near future. We are optimists and believe before the present year expires *trade will be very greatly improved,* and we hope back to normal conditions again."

CANADA CRUSHED STONE CORPORATION, LIMITED, DUNDAS, ONT.:—"We are not increasing our output at present. This is our dull season but we are keeping our regular gang employed on stripping and new construction, which work could be done cheaper in the summer time. We are adding new machinery to increase the efficiency of our screening, and to enlarge our ground storage system. Business for next year seems fairly encouraging."

Will Increase Sales

PERFECTION STOVE CO., LIMITED, SARNIA:—"We are not increasing our operations just at this time, but did start on an increased program January 1st., which is equivalent to about 75% of our capacity. Have added about fifty employees since January 1st. Not booking any interesting orders and bookings for the future are a good deal less than last year, but the first three weeks of this year in actual shipments show an increase of over 100%, compared with the same three weeks last year. This would indicate that dealers' stocks are low and that they are still ordering to cover immediate sales rather than stocking for the future. We have finished the year 1921 with a decrease of 10-$\frac{9}{10}$% in net sales, which was much better than we expected. *We are looking forward to the year 1922 with the expectation of an increase in sales of about 25%.* We believe that a gradual recovery is better than a very rapid one and our future plans are based accordingly."

CANADA SPOOL & BOBBIN CO., LIMITED, WALKERTON:—"Our sales for January, 1922, were about 75 per cent. of what they were for the same month of 1920 and 1921, though reduction of selling price is accountable for a considerable part of this shrinkage. We are really *doing double what we did in any January up to and including 1919,* due to the installation of a number of the latest types of English and Scotch bobbin machines. We are also employing more hands now than then. Since the first of the year we have run only eight hours a day. Up to the end of 1921 we ran full time. Our shipments to the United States, while small, are gradually increasing."

NATIONAL CASH REGISTER CO., OF CANADA, LIMITED, TORONTO:—"We are very hopeful for this year. The bad conditions we had last year are beginning to react into hopeful conditions for 1922. Here are the immediate prospects: First, we know buying must resume because statistics show us that the decline in factory outputs is much greater than consumption of goods, and this can't go on forever; second, there will be further improvement in Europe; third, money will be cheaper; fourth, the big gap between farm products and manufactured articles will be closed up. We don't expect any boom, for there is no boom in sight. But we do know that hard work will bring prosperity this year."

Doubling Production

ALPHONSE RAYMOND, MONTREAL:—"We intend to double our production in 1922. In our lines the market is absolutely bare of stock and the wholesalers and retailers have been buying for many months from hand to mouth. Around the same date last year there were any quantity of goods in the wholesalers' and retailers' hands. Since January 1st., we have orders from districts that have never bought before in the winter time. On account of lack of confidence in the business last fall, dealers outside of Montreal bought very little. Since last week (Jan. 30) we *are employing more labor* and we expect to do so gradually till late this fall."

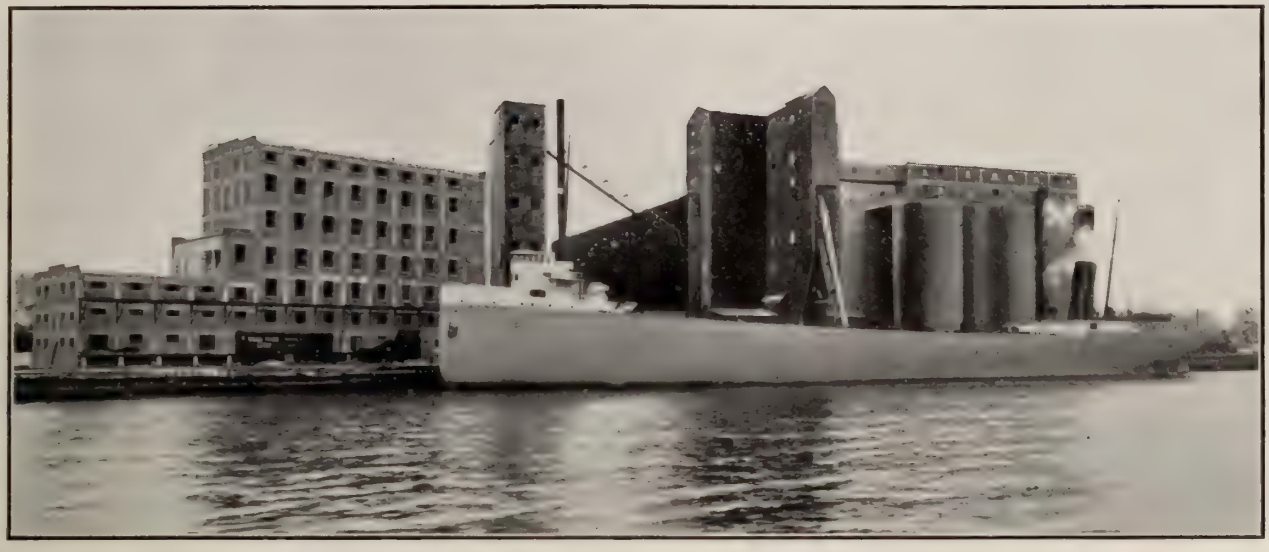
THE STRATFORD MFG., CO., LIMITED, STRATFORD:—"At the present time business is looking very bright for us for 1922. Our fiscal year ends October 1922, and taking the first four months of our fiscal year, which includes the month of January, we have shipped out 47% more goods than we did the same period last year. We have received 25% more business. Our prices are down about 15% over a year ago, so that we are not only booking and shipping more business but we are booking and shipping more business against a reduction of 15% on our selling prices over a year ago, and, taking that into consideration, it is very encouraging. We are figuring on adding new machinery, and *since October first we have increased our factory force 57%.* Our export business is starting to come in, and we expect that this year will be a banner year for us. We are not piling up any stock but are shipping the goods out just as fast as we make them."

JOHN WATSON MFG., CO., LIMITED, AYR, ONT.:—"Owing to a very serious fire at our plant in the summer of 1920, we have been up to the present working under a severe handicap for space. In the fall of 1920 we completed part of our new plant and were able to keep up our connections in warehouse trucks, but had to cut out several lines of farm implements. During the summer and fall of 1921, we re-built another portion giving us nearly 25,000 feet more floor surface. At the present time we are moving into this new building. The new plant, when completed—and it should be running within the next month (February)—will be more complete and up-to-date than the one destroyed by fire, and will be admirably adapted to our needs, and we will be in position to take care of any revival of trade. The demand for our goods has not been as large as before 1920, but has been very steady. The re-opening of industrial business will bring its increase to us."

Feeling More Cheerful

HAMILTON CARHARTT COTTON MILLS, LTD., TORONTO:—"Business during this month (January) is slower than we had anticipated. We however feel more cheerful regarding the future than we did a year ago. Our men all report that merchants are in need of goods and their shelves are practically empty. This itself however is encouraging but buyers are only ordering from hand to mouth. While the orders are small, sales are more frequent

RECENT INDUSTRIAL DEVELOPMENTS ILLUSTRATED



New Flour Mills at Midland, Ontario

The flour mills, which will have an initial capacity of 1200 barrels of flour and 100 tons of feed per day, stand to the left. They are of concrete and brick, 56 x 196 feet, and seven storeys high and have just been completed. To the right are the Midland Elevators, the close proximity of which will ensure a constant supply of grain.

than they would be otherwise. We have increased our range so that we will be manufacturing more goods than we did last year, and hope to have our plant running 100% capacity in thirty day's time. *Sales for the past three months have been greater than they were the previous year*, and considering that goods cost less, a great many more units have been disposed of than when goods were much higher than they are to-day. While we could take care of a great deal more business still on the other hand our sales are greater than they were in January 1921."

All are Hopeful

DOMINION FORGE & STAMPING CO., WALKERVILLE:—"Prospects are fair for the coming year. We are increasing operations and output and are taking on more hands."

LA BRASSERIE CHAMPLAIN, LIMITEE, QUEBEC:—"Prospects for the coming season in the beer business are good, due to our provincial laws. We contemplate enlarging our brew-house capacity during the summer."

THE BURROWS MFG. CO., TORONTO:—"We expect and intend to put on more hands by March 1. Our new all-metal fly screens are meeting with great success. We are booking some good orders and adding more machines. We are being crowded for space but will try to pull through for this year."

ALGOMA STEEL CORPORATION, SAULT STE. MARIE:—"While no important business is immediately in sight, we are hopeful of gradual improvement throughout the year. The general situation is much improved, with operating costs and material prices considerably reduced. If the railways experience any betterment of business, we look for a large volume of orders for railway equipment."

HAMILTON GEAR & MACHINE CO., TORONTO:—"Plant is running full time and *additional men are being taken on* gradually. Additional equipment has been installed, in particular large Bertram vertical boring mill capable of turning work up to 19 ft. 4 ins. diameter and 6 ft. face. A second travelling crane of 10 tons capacity has been placed over the main bay in the machine shop."

DOMINION FISHERIES LIMITED, HALIFAX:—"There is a gradual improvement on about all our lines as conditions in the dry fish trade seem to be improving in almost all foreign countries and there seems to be much less stock on hand than at this time last year. The canned lobster situation seems to be in much better shape, as foreign markets are about cleaned up of stock and when the season opens in April *we expect to see a ready demand for new goods*."

BRITISH AMERICA PAINT CO. LIMITED, VICTORIA, B. C.:—"This year we have received more spring orders than we have for the past two seasons. We are looking forward to a very good year's business. For the past several years, in fact ever since the war began, painting has been put off, first owing to scarcity of labor; second, owing to high price of paint material. Labor has come down and, with the reduced price of paint, there are more enquiries and the general feeling is that there will be a great deal of painting done in Western Canada. *We are working full time*."

HENRY DAVIS & CO., LIMITED, TORONTO:—"Business today is considerably ahead of a year ago with very bright prospects for the future. *We are increasing our plant* and within three months will be in a position to show a like increase in our production to the amount of about fifty per cent over 1921.

Working Night and Day

Engineering and Machine Works of Canada, Limited, St. Catharines, are working night and day on orders for marine boilers received during February. Contracts were closed for ten Scotch type marine boilers, 14 feet 7 inches diameter, 10 feet 8 inches long and 180 lbs. working pressure, eight for delivery to Three Rivers and two to Collingwood. Spring delivery being required, it was necessary to put on a night shift and the boiler department will be kept busy for the next three months.

All our customers are feeling very confident regarding the fall; this, with the exception of the West, where orders are coming in very slowly. English competition is very keen but we still feel capable of holding our own."

FAST TYPERSETTERS LIMITED, MONTREAL:—"The printers' strike is over, so far as we are concerned. *Our plant is working to capacity* in two shifts per day. Production is greater than before the strike and increasing each month."

More Enquiries

CANADIAN PEERLESS JEWELRY CO., LIMITED, SHERBROOKE:—"During the past month or six weeks there have been a larger number of inquiries for goods from foreign countries and, while inquirers are apparently looking for the best prices possible, in other words shopping around, we believe that this is a good sign that stocks in different parts of the world are fairly well liquidated and that the inquiries are the outcome of this."

THE CANADIAN TOP & BODY CORPORATION, LTD., TILBURY:—"The Canadian Top and Body Corporation of Tillbury, Ontario, are preparing to take care of a very substantial increase in production for 1922, by installing additional machinery and equipment in both their auto body and trimming departments. They also contemplate doubling the capacity of their lumber kilns by the installation of two new kilns with a capacity of 30,000 ft. each. They are adding daily to the number of hands employed and by February 1st will have over two hundred men in their employ."

THE IMPERIAL VARNISH & COLOR CO., LIMITED, TORONTO:—"During November and December we have been operating our factory five days a week, closing Friday night to Monday morning. We started January 1st to work full time but with a reduced staff, having in mind the accumulating of stock to take care of spring shipments. About the middle of the month business started coming in, in such volume that *we found it necessary to take all men temporarily laid off and in some departments extra help.* In our dry color department we are working overtime, and expect to have to do so for sometime. We are anticipating an active spring business in

our "Trade Sales Department" due entirely, we believe, to the foresight of the paint and varnish manufacturers all over the North American Continent in starting three years ago our co-operative "Save the Surface And You Save All" advertising campaign, with a view to educating the public in the economy of painting to preserve their property. We enjoyed very beneficial results from this campaign during 1920 and 1921; and it is going to be continued with greater force during the present year. We are expecting much greater returns from its accumulated effects during 1922."

Improvement This Year

CARR FASTENER COMPANY OF CANADA, LIMITED, HAMILTON:—"It is hard to give you information, as our company has just been recently established in Canada and we have not enough data on hand with which to make comparisons. Of course last year was a bad year, and *we are looking forward to this year being much better*, but whether this will be due to the fact that we are getting on our feet as a new concern or due to natural increase in business, it would be hard for us to say."

DODGE MANUFACTURING CO., OF CANADA, LTD., TORONTO:—"The shortage of storage and grain handling facilities at the terminals which developed last fall and seriously hampered the movement of the crop, has influenced two of the large elevator companies at Fort William to increase their plants and equipment now, so as to be ready for the harvest this year, and their contracts for grain elevating and conveying equipment have been placed with the Dodge Mfg., Co., of Canada, Limited who have built the equipment for nearly all the large elevators in Canada."

STANDARD UNDERGROUND CABLE CO., OF CANADA LTD., HAMILTON:—"The prospects in our line of business are for an increased demand for our products during the coming year. *We are increasing our operations and the output of our products* and have taken on more help. We have been working five days a week for some time past, but have now arranged to work full five and one-half days per week. We have had some fairly good orders, and are quoting on a number of large propositions, some of which will, no doubt, be placed in the near future."

RIVERBANK MANUFACTURING CO., LTD., NEW GLASGOW, N. S.:—"In our steel spring department, *we find business recovering gradually*. Our products are made almost exclusively from steel and other materials of Canadian manufacture, produced in this locality, and from which we believe tools are produced at least equal in quality to any similar lines which have in the past been marketed."

Automobile Industry

WILLYS-OVERLAND, LIMITED, TORONTO:—"There are several factors on which we base our calculations for increased business in 1922:—(1) The number of cars due for replacement far exceeds those of any previous year; (2) Prices reduced to pre-war basis enlarge the circle of possible new owners of motor cars; (3) Prices have been stabilized; (4) Dealers in January and February are reporting signed orders for spring delivery—something they did not do a year ago; (5) Increased realization that the motor car is essential to personal efficiency—it is recognized as an indispensable utility and dominating influence in the progress of every community; (6) Extension of good roads reduces upkeep cost of cars, thus conducing to increased sales. Based on deductions from these factors, *we are increasing factory staff and production of Overland cars commencing in February*, and with gradual increases thereafter as business warrants."

DITCHBURN BOATS, LIMITED, GRAVENHURST, ONT.:—"During the months of September, October and November, when we usually close contracts for delivery in the following spring, results in this connection were very disappointing. We had more prospects than ever, but when we came to the point of closing, there seemed to be a pessimistic feeling which prevented the actual signing of the orders. This continued throughout December, although we did get considerable business, but during the present month (January) we are glad to say that we have booked up orders and now have an amount equal to those of a corresponding period last year and there is every indication that we will very shortly close more orders that *will make our output equal, if not greater, than that of 1921*. Two-thirds of our business is with Canadians and the other third with Americans who summer in Canada. We have nothing to export. In soliciting business of this kind we come in contact with a number of influential business men and have found the most optimistic spirit prevailing lately and the firm belief is that business conditions will shortly improve. We are, of course, only a small business concern; we employ at the present time 30 hands, mostly skilled mechanics, and will shortly increase this to 40 or more."

Collingwood Company Gets an Interesting Order

An order for the construction of the first vessel of its kind to be built in Canada has been placed by the National Sand and Material Co., Limited, Welland, Ontario, with the Collingwood Shipbuilding Co., Limited, Collingwood. This is a special type of steamer for carrying sand and gravel. It is 258 feet overall, 43 feet beam,20 feet deep and will have a deadweight carrying capacity of approximately 3000 tons. The vessel will embody all the latest improvements for sucking and carrying sand and gravel. It will work in the various rivers and is being specially built to supply material for very large contracts. All of which indicates that the owners expect to do some big business in Canada.

THE T. A. LYTLE CO., LIMITED, TORONTO:—"Our business is always very slack during the three winter months, but our salesmen all report promises of good business early in the spring, so that we are *looking forward to a very substantial increase in sales* for 1922. We are in a position to increase our output any time that business appears to be increasing and we expect to take on more hands shortly. We have not booked any big orders yet but have had some very interesting enquiries."

E. PULLMAN CO., TORONTO:—"Business with us is no better nor no worse than in October and November 1921. Customers on whom we have called this year are very optimistic and are *looking forward to good business early this spring*. What orders we have received this year are small, most of our customers preferring to buy in hand to mouth quantities. Just what reason they have for doing this we do not know, as we have assured our customers that there will be no reduction in price in our product for at least three or four months."

COCA-COLA COMPANY, TORONTO:—"We take pleasure in informing you that our increase in 1921 was well over 100%, and so far this year we are exceeding that over the previous year. *It has become necessary to double the capacity of our plant*, and we are adding an ice machine made by Linde Canadian Refrigeration Co., Ltd.; also a 32 spout liquid low pressure filler, and two new soakers. Plans are on foot now to build a new plant."

Sold Out of Stock

STAUNTONS, LIMITED, TORONTO:—"Business has been very poor for sometime back, but the sales for November and December were rather better then for November and December 1920, though they were considerably below normal. I think we will be able to say the same for January. There is no great activity as yet. It seems to us from all indications that the *spring business will be quite active when once it starts*. We believe the majority of customers are pretty well sold out of old stocks, and have ordered very much on the safe side for their spring requirements. This is a time of year when big business is rarely if ever booked. The heavy placing in our business is always done in the summer or early fall, and we are not likely to negotiate any really large orders until the start of our new season in July next."

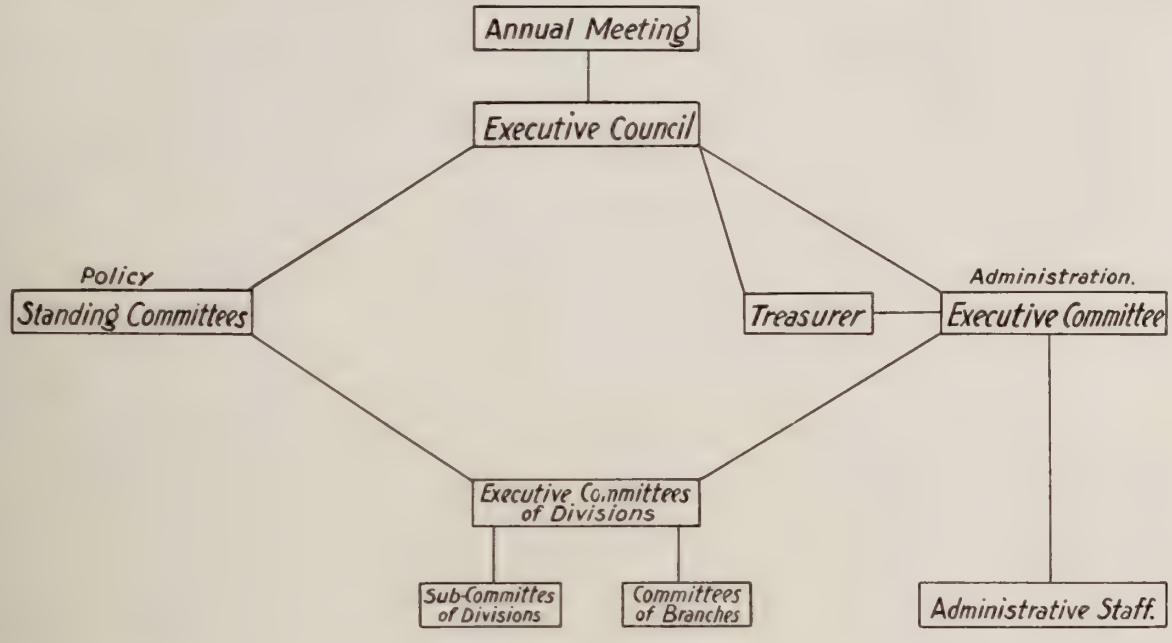
OAK TIRE & RUBBER CO., LIMITED, TORONTO:—"The Oak Tire and Rubber Co., are several months behind on orders and have started a night shift to increase production for the fulfilment of orders now on hand. *We are engaging additional help* and have booked some very interesting business which is more or less, beyond our expectations. Additional machinery is necessary and arrangements are being made for the purchase of such. Canada's future of course depends upon her good roads, which are the arteries of trade and intercommunication, bringing farmers' production closest to the point of distribution, encouraging the use of hotels, additional purchase of supplies and greater activity. The mildness of the winter to date has made it possible for considerable motoring, meaning additional tires in the spring. In fact, the writer is firmly of the belief that business in Canada has turned the corner and is now headed in the right direction."

A 50 Per Cent. Increase

ROBERT H. HASSLER LIMITED, HAMILTON:—"Our last year's business was just a trifle below normal. In keeping with the general industrial depression throughout last year, we did not enforce our contract schedules. Therefore we find our distributors and dealers with little or no stock on hand at the beginning of this year. We will handle from Hamilton all export business to the British Isles and British West Indies. This, coupled with the above conditions, assures us that *our business is going to be increased fully fifty per cent over any previous year* of our Canadian history, which began in January 1918. We have also found it possible to make a reduction in what we term the single spring type Hassler Shock Absorber, which, of course, is another factor that we believe will help increase our business for 1922. We have a the present writing, orders and actual shipping dates from bona fide distributors. These orders are on a very conservative basis, so much so, that we are sure that they will be increased later on. In summing up all of the conditions which have a bearing on our product, we are free to state that the outlook for us is exceedingly bright."

(*For additional Reports see Page 89.*)

Canadian Manufacturers' Association, Chart of Organization



THE above chart illustrates the government of the Canadian Manufacturers' Association. The Annual Meeting, to which all members of the Association are invited, is the supreme governing body. It approves or disapproves of the work done during the preceding year; it outlines policies to be followed during the coming year; it fixes the fees which shall be levied on members; it makes changes in the by-laws.

Between Annual Meetings the Association is governed by the Executive Council, the members of which are elected at the Annual Meeting, for a term of one year, and on the basis of one representative for every fifty members of the Association. Since the formation of the five divisions, however, the divisions elect their own members to the Executive Council at divisional annual meetings, and these elections are approved at the Annual General Meeting.

The chart separates policy and administration. The policies of the Association are determined by the following standing committees:—Tariff, Transportation, Legislation, Membership, Insurance, Industrial Relations, Commercial Intelligence, Publishing and Education. The members of these committees are elected in the following manner:—

A chairman and five members for each standing committee are elected at the Annual Meeting, on the recommendation of the Nominations and Resolutions Committee. These form a selecting committee to add to their numbers.

The administrative work of the Association functions under the direction of the Executive Committee, which consists of the President, the Vice-President, the Treasurer, the President of the next preceding year, the Chairman of Divisions, the chairman of standing committees and six members of the Executive Council, two of whom are elected each year to hold office for three years, or until such time as their successors are appointed. The Treasurer is a member ex officio of the Executive Committee and the Executive Council, and reports directly to both. The five divisions of the Association are governed by the Executive Committees of the divisions which are elected at the annual meetings of the divisions. They deal finally with all matters of divisional concern, but are careful not to depart from the established polices of the Association. They refer general matters of policy to Head Office to be considered by the proper standing committee and to be referred to the Executive Council. Matters of administration are referred to the General Executive Committee. Branch committees deal with branch matters and report to the Executive Committees of their divisions. The administrative or salaried staff are under the direction of the general Executive Committee, which, however, follows the practice of asking for recommendations from the divisional executive committees in dealing with divisional administrative staffs. The Association has over 700 members constantly working on committees.

News and Views of the Association

There will be found each month in this department a record of the various activities of the Canadian Manufacturers Association during the preceding month. The information is supplied to INDUSTRIAL CANADA officially, and all members of the Association are urged to acquire the habit of reading and checking over the contents of the department carefully in order to keep themselves posted on the work of the Association

February Meeting of the Executive Council

Held at Ottawa and featured by presentation of Memorials to Government

ADDITIONAL importance attached to the February meeting of the Executive Council, by reason of the fact that it was followed by an important interview with the members of the Dominion Government, at which the Association's position with regard to several important questions relating to trade and commerce were presented to the new administration.

The meeting of Council, which took place on the afternoon of Wednesday, February 22, was preceded by a luncheon held at the Chateau Laurier at 12.30 P.M. This luncheon was presided over by the first vice-president, John R. S. Shaw, and was featured by speeches from leading members of a delegation from British Columbia, who were in the capital in connection with the freight rates case and other matters.

Hon. Alex. Manson, the new attorney-general of British Columbia was the first speaker, devoting his time to a vivid description of the beauties and resources of the Pacific Coast province and pointing out that the Grand Trunk Pacific, which traversed the very heart of the province, had not been built before its time but was needed for the development of the immense resources of the central portion of British Columbia.

Col. F. M. Gaudet, representing the Council for Industrial and Scientific Research, emphasized the practical aspect of applying science for increasing production and the development of natural resources, instancing the experiences of European countries and the United States. He enumerated striking cases in which millions of dollars had been made or saved as a result of scientific experiments. These included the following:—

1. American Industries are spending $20,000,000 each year for scientific research. They know that it pays. The United States Federal and State Governments appropriated $57,000,000 for research in 1919.
2. The General Electric Company investigated the properties of tungsten, and, by the use of a few hundred pounds for electric lamps, a saving of $250,000,000 annually is made in the United States alone.
3. E. I. Du Pont de Nemours and Company of Wilmington, Delaware, manufacturers of explosives and chemicals, estimate that their research laboratory has yielded a a profit of $82,401,000 from 1912 to 1918, inclusive. This represents an annual rate of 1370 per cent. on their investment for research.
4. The Gayley invention of the dry air blast in the manufacture of iron, saves $30,000,000 a year.
5. The American Telephone and Telegraph Company has appropriated $25,000 a year for five years, to be used by the American National Research Council.
6. The Mellon Institute was established by the Mellon brothers, bankers of Pittsburgh, (one of whom is now head of the Treasury Department at Washington) shrewd business men, who know that it pays to provide manufacturers with a scientific laboratory. They have recently donated an additional sum of $1,500,000 to their original gift of several millions to the Institute which bears their name.
7. As a result of discoveries made at the Mellon Institute, the American Bread Company has been able to save $1,500,000 a year in one of its departments.
8. John D. Rockefeller, looking about for the best way to make his great fortune serve humanity, set apart $200,000,000 for scientific research.
9. Highly organized research in the development of agricultural machinery has, in the United States, reduced the labour cost of seven crops by $681,000,000 as compared with the methods of only fifty years ago.
10. The work of Coolidge and Langmuir, in developing the nitrogen tungsten lamp now extensively used, has reduced the consumption of the electric current to one-seventh of the former quantity.
11. Michael Faraday discovered the principle of the dynamo electric machine in the last century, and, without this knowledge, the whole art of electrical engineering could not exist. The value of electric power generated in Canada is $60,000,000 of which one-third is exported.
12. The telephone was invented by Dr. Alexander Graham Bell, a Canadian scientist, and Canada has nearly one million telephones representing a capitalization of $100,000,000. The Telephone Company spend annually for research, the results of which are all about us, a sum greater than the total income of many universities, and the enormous amount saved by the use of the telephone, is incalculable.
13. The Frasch process of refining crude sulphur-bearing Canadian and Ohio oils has increased their value sevenfold.
14. Aluminium was discovered by a German chemist, and originally cost $90 a pound. It is now manufactured at Niagara and Shawinigan Falls, and the scientific work done by Hall and Heroult has reduced the cost from $90 to 22c a pound.
15. All of the large manufacturing corporations in the United States, whose names appear below maintain extensive industrial laboratories. They find that it pays them to do so.

American Rolling Mill Company.
American Brass Company.
Detroit Edison Company.
Dodge Brother.
Du Pont de Nemours and Company.
Eastman Kodak Company.
General Electric Company.
General Motors Company.
The B. F. Goodrich Company.
International Acheson Graphite Company.
National Carbon Company.
National Cash Register Company.
National Electric Lamp Association.
New Jersey Zinc Company.
Pennsylvania Railroad Company.
Reo Motor Company.
Studebaker Corporation.
T. A. Edison Laboratories.
Westinghouse Electric & Manufacturing Co.
Western Electric Company.

W. H. Malkin, W. H. Malkin Co. Limited, president of the Vancouver Board of Trade, was the next speaker, his theme being the manufacturing possibilities of British Columbia. He urged that the province should not be judged by its debts but by its productive capacity, which he declared was larger than that of any other province per capita.

J. B. Thomson, James Thomson & Sons Limited, chairman of the B. C. Division, C. M. A., contributed an interesting address on various aspects of the business life of British Columbia, and F. E. Burke, Wallace Fisheries, Limited, dealt with the fishing industry of the Pacific Coast.

Council Meets

The register of members present at the meeting of the Executive Council was as follows:—

Hon. C. P. Beaubein, Montreal.
H. B. Bell-Irving, Vancouver.
Howard E. Blood, Walkerville.
George Brigden, Toronto.
F. E. Burke, Vancouver.
Thos. B. Caldwell, Perth.
M. G. Campbell, Windsor.
W. H. S. Cane, Newmarket.
B. W. Coghlin, Montreal.
F. S. Corrigan, Toronto.
R. Montague Davy, Montreal.
J. M. Duck, Windsor.
W. M. Gartshore, London.
C. W. Jeffrey, Ottawa.
P. E. Joubert, Montreal.
H. F. E. Kent, Toronto.
Brig.-Gen. A. E. Labelle, Montreal.
R. H. Mackay, New Glasgow.
J. S. McKinnon, Toronto.
L. L. McMurray, Toronto.
C. T. Miller, Walkerville.
W. H. Miner, Granby.
James Naismith, Ottawa.
A. Neighorn, Montreal.
Joseph Picard, Quebec.

Jean Rollard, Montreal.
John R. Shaw, Woodstock.
L. W. Simms, St. John.
C. Howard Smith, Montreal.
R. P. Sparks, Hull.
R. A. Sproule, Ottawa.
F. W. Stewart, Montreal.
H. J. Thomas, Ottawa.
J. B. Thompson, Oshawa.
J. B. Thomson, Vancouver.

Executive Committee

The Executive Committee's report announced that arrangements were proceeding with regard to the annual meeting, to be held at the Algonquin Hotel, St. Andrew's, N. B. on June 20, 21 and 22, and the subsequent excursion through the Maritime Provinces. Close co-operation with the Executive Committee of the Maritime Division was being observed.

The Committee's report also alluded to the successful completion of arrangements for the trip to the British West Indies, which is now being participated in by a party of members under the leadership of the president, W. S. Fisher.

Recommendations that a section of INDUSTRIAL CANADA be printed in French for the benefit of French-Canadian members and that arrangements for the publication of a new edition of the Canadian Trade Index be undertaken were presented.

Reporting on membership work, the committee stated that for the first ten months of the fiscal year, 341 applications for membership had been received and 336 resignations, being a net gain of 5. These were distributed as follows,—

Division	Applications	Resignations	Change
Ontario	117	151	— 1
Quebec	65	19	—11
Prairie	86	47	+29
British Columbia	36	25	+11
Maritime	11	31	-25
	341	336	+ 5

Tariff Committee

The Tariff Committee's report dealt with the following matters,—Deputation to Dominion Government, United States permanent tariff, the Tariff Board in Australia and the usual Board of Customs decisions, departmental rulings, etc., to which reference is made elsewhere.

On the subject of the United States permanent tariff, the report stated,—"The United States permanent Tariff Bill, which is to succeed both the Emergency Tariff and the 1913 Tariff, passed the House of Representatives of the United States, and for some months has been under the consideration of the Finance Committee of the Senate. The indications are that before the end of March the bill will be reported by the Finance Committee to the Senate for the consideration of that body. It also appears likely that this bill will contain the much discussed "American Valuation Plan" of appraising imports for duty purposes. This "American" plan takes the wholesale price in the United States as the basis on which to compute the duty to be charged on the imported competing article."

The Tariff Board in Australia was referred to as follows,—"A Tariff Board Act was passed by the Commonwealth Parliament on 9th December, 1921, and is to become operative on a date to be fixed by proclamation. The Act provides for the establishment of a tariff board consisting of three members. The Board of Trade Department of the Government of the United Kingdom, in the Board of Trade Journal of February 2nd, 1922, states that the functions of the Tariff Board are defined in the act as follows:—

15.—(1) The Minister for Trade and Customs shall refer to the Board for enquiry and report the following matters:—

(a) The classification of goods under all Tariff items which provide for classification under by-laws.
(b) The determination of the value of goods for duty under section one hundred and sixty of the Customs Act 1901-1920.
(c) Any dispute arising out of the interpretation of any Customs Tariff or Excise Tariff, or the classification of articles in any Tariff, in which an appeal is made to the Minister from the decision of the Comptroller-General.
(d) The necessity for new, increased, or reduced duties, and the deferment of existing or proposed deferred duties.
(e) The necessity for granting bounties for the encouragement of any primary or secondary industry in Australia.
(f) The effect of existing bounties or of bounties subsequently granted.
(g) Any proposal for the application of the British preferential Tariff or the Intermediate Tariff to any part of the British Dominions or any foreign country, together with any requests received from Australian producers or exporters in relation to the export of their goods to any such part or country.
(h) Any complaint that a manufacturer is taking undue advantage of the protection afforded him by the Tariff, and in particular in regard to his—
  (i) Charging unneccessarily high prices for his goods; or
  (ii) Acting in restraint of trade to the detriment of the public; or
  (iii) Acting in a manner which results in unnecessarily high prices being charged to the consumer for his goods.

and shall not take any action in respect of any of those matters until he has received the report of the Board.

(2) The Minister for Trade and Customs may refer to the Board for their enquiry and report the following matters:—

(a) The general effect of the working of the Customs Tariff and the Excise Tariff, in relation to the primary and secondary industries of the Commonwealth.
(b) The fiscal and industrial effects of the Customs laws of the Commonwealth.
(c) The incidence between the rates of duty on raw materials and on finished or partly finished products; and
(d) Any other matter in any way affecting the encouragement of primary or secondary industries in relation to the Tariff.

(3) If the Board finds on enquiry that any complaint referred to it under paragraph (h) of sub-section (1) of this section is justified, it may recommend—

(a) That the amount of duty payable on the goods the subject of the complaint be reduced or abolished; or
(b) That such other action as the Board thinks desirable be taken, but shall, before it makes any such recommendation, consider carefully the conditions obtaining in the industry as a whole.

16.—(1) Upon receipt of a report from the Board in pursuance of the last preceding section, the Minister may, if he thinks fit, take action according to law in respect of any of the matters dealt with by the Board in its report.

(2) A copy of every report made in pursuance of sub-section (3) of the last preceding section shall be laid on the table of each House of the Parliament within seven days, if the Parliament is then sitting, and, if the Parliament is not then sitting then within seven days of the next meeting of the Parliament."

Transportation Committee

The Transportation Committee presented a long and comprehensive report, which covered the following matters,—Reduction in express rates between points in Canada; new international express tariffs, effective January 1, 1922; the Bell Telephone case; general investigation re equalization of eastern and western freight rates; appointment of traffic officers by provincial governments.

The committee announced that the resignation of Colonel A. F. Hatch, as chairman of the Committee, owing to a lengthy absence from the country, had been received and accepted and that W. S. Campbell's appointment as chairman was recommended, Mr. Campbell having been last year's chairman.

Legislation Committee

In its monthly report, the Legislation Committee gave an outline of proposed provincial legislation in Ontario and Manitoba and touched on workmen's compensation developments in Saskatchewan. It also dealt with company cases and "blue sky" legislation.

With regard to company cases, the report stated,—"In pursuance of a dictum of the Lords of the Judicial Committee of the Privy Council embraced in the judgment delivered on 25th February, 1921, five provinces have now enacted amendments to their provincial acts, requiring every commercial and industrial corporation, including Dominion companies, which have an office or are doing business within the respective jurisdictions, to register and make an annual return, subject to a daily penalty for not complying with this obligation, and such companies are also subject to a provincial corporation tax—these provinces being Ontario, Nova Scotia, New Brunswick, British Columbia, and Saskatchewan. We are advised that the Government of Alberta will not bring down any amendment to its companies act this session, preferring to await the proposed inter-provincial conference. From correspondence your Committee has had with several of the other provinces, the prospect of securing results in the way of more uniform legislation and regulations in connection with company matters, look favourable, and the negotiations will be renewed, through the Provincial Secretary of Ontario, at the conclusion of the present sessions of the various legislatures."

Industrial Relations

Quite a number of matters of importance to the membership were covered in the report of the Industrial Relations Committee. Among them were,—International labor unionism in Quebec, which referred to the stand taken by Premier Taschereau in reference to the printers' strike in Quebec; cost of living in Canada, which pointed out that, while cost of living had declined approximately 40 per cent. since July, 1920, rents had not come down, due largely to the failure to reduce wages in the building trades; unemployment, which indicated that about 200,000 persons were at present out of employment involuntarily, while 17 strikes involving 2,900 workers were in progress.

The report gave the following information with regard to Industrial Courts,—"Both in Canada and in the United States there is noticeable a growing tendency to advocate the setting up of some sort of industrial court after the pattern of the Industrial Court of Kansas. Thus, in Saskatchewan a certain section of organized labour is urging that a standing court of nine Supreme Court Judges from the various provinces should be set up to deal with all industrial disputes. Again a bill has recently been introduced in the New York State Legislature providing for the holding of an industrial relations term by one of the ordinary civil courts. The bill gives the court power to take over and operate essential industries affecting the public welfare, also to fix wages, hours and conditions of work, etc., in the industry or plant affected by

a dispute which has been referred to the court by the Governor. Strikes and picketing would be made unlawful.

"Your Committee is naturally giving the closest attention to this question, and will report on the progress of the New York legislation. In the meantime, however, your Committee is not inclined to put too much faith in the idea that the decision of an ordinary civil court adjudicating on an industrial dispute, would be accepted and enforceable in the same way as a decision in an ordinary civil suit; in the latter case the decision is simply the application of well-established and long-respected principles to the particular facts, while in the case of an industrial dispute there are no established principles or standards which are accepted by both parties."

The report drew attention to the fact that on the 18th of February, there was organized in Toronto a new Workers' Political Party, the policy of which was declared to be "the consolidation of labour unions on militant lines by permeating these organizations with a revolutionary spirit, exposing the re-actionary and treacherous labour union bureaucracy, stimulating the sense of aggressive rank-and-file control, and resisting to the utmost the expulsion of militants and the splitting up of the unions in general"

Insurance Committee

The Insurance Committee devoted the bulk of its report to a summary of the hearings of the Special Committee of the Ontario Legislature, which has been engaged in revising the present Ontario Insurance Act. Representatives of the Association had appeared before the Committee and expressed their views in accordance with the policy approved by the Executive Council.

Continuing, the report says—"The Manager of our Insurance Department reports that the Special Committee of the Legislature has now finished its sessions and that the act will probably not be submitted to the Legislature as a whole, but in sections, and that some parts of the act will not be submitted during this session. The only item upon which we attached any importance was Sub-Section 5 of Section 221, which prohibits an assured from employing a licensed broker to do what he might do himself. On the recommendation of this Association the Committee accepted a re-draft of this paragraph, which brings the act down to practically the same terms as now exist. The only difference is that the broker must advise the Superintendent of any unlicensed insurance more quickly than was formerly the case.

"Somewhat to our surprise, the underwriters raised no objection against Part 15 of the proposed act, which provides for the supervision of rate-making bureaus, and this apparently will be passed without controversy, by the Legislature. It gives the Superintendent power to receive complaints from any insurer of discrimination or unfairness in rating and to demand of the rating bureau in case of such complaints details showing how the rate is made up and any other information necessary. This we believe, will be of extreme value to the assured, as even the existence of such a board of appeal will cause the rating officials to be as reasonable as possible.

"The section providing for the licensing of foreign mutuals and reciprocals under the law of the province was passed by the Committee and will be submitted to the Legislature. The local underwriters opposed it with all their power and we understand that they have already sent a delegation to the Premier asking him not to press for any legislation which would cause undesirable controversy between the province and the Dominion.

"Mr. Finlayson, Dominion Superintendent of Insurance, addressed the Committee and stated very bluntly that if the legislation were passed the Dominion Government would be compelled to challenge its validity. In other words, he intimated that the first foreign mutual or reciprocal which enters Ontario under the provincial act will be prosecuted by the Dominion under the Dominion law, which means, of course, that the case will be taken to the Privy Council."

The Insurance Committee further reported that members in the Prairie Division have appointed a committee on insurance to investigate ways and means of securing a reduction of insurance rates, which they claim, are higher in that territory than elsewhere in Canada. The committee are studying this problem, and will report at a later date.

Commercial Intelligence

This Committee presented a summary of the work done during the past month by the Commercial Intelligence Department, which included a wide variety of services. Continuing, the report said,—

"The views of the Committee regarding the proposal of the Dominion Bureau of Statistics to issue a monthly review of Canadian statistics were asked for. This proposal aims at putting in the hands of Canadian business men at a subscription price of two dollars per year a brief and concise comparative review of the statistics covering a wide range of general business and dealing with prices, population, production, external trade, internal trade, transportation, finance and labour.

"The great advantages of this proposal over the present system of distribution are that the results of the Bureau's work will be available monthly in one volume instead of annually in many volumes, and that a bird's eye view of Canadian conditions will be presented promptly after compilation instead of at the end of the fiscal year.

"Your Committee is in favor of the production of a summary review, particularly since it will make the production of statistics more economical and more useful to the business public. In order to ensure the production of a review suited to business purposes, your Committee recommends that the Manager of the Department be allowed to discuss the proposal fully with the Dominion Statistician."

The report also stated that, at the suggestion of the Committee, the Dominion Commercial Intelligence Service had now completed a report on the various national export credit plans in force or proposed. In a similar connection the organizer of the ter Meulen Plan under the auspices of the League of Nations proposes to keep the Committee informed on developments and to report on the results of the Genoa Conference.

The Committee reported that it had been in receipt of a cable from the British Empire Producers' Organization calling attention to the fact that responsible Canadian houses by means of the Trade Facilities Act can obtain British goods on credit if they so desire and asking that the members of the C. M. A. be so informed. The Committee suggested that an outline of the operations of the Act be prepared for insertion in INDUSTRIAL CANADA.

During the past month the Committee collected tonnage figures and other data bearing on the development of export trade with Mexico. All the evidence so far gathered pointed to the necessity of a steamship connection between Canadian and Mexican ports. The Committee recommended that this information when completed be handed over to the Transportation Committee for consideration.

Following the reading and adoption of reports, the Council took up in order and discussed the statements on trade questions which had been prepared for presentation to the Government on the following day and arrangements were made as to who should introduce each statement.

Deputation Waits on Members of Government

On Thursday, February 23, a large deputation of members of the Association headed by John R. Shaw, first vice-president, and C. Howard Smith, second vice-president, waited on the following members of the new Dominion Government at 11 A. M.

Hon. William Lyon Mackenzie King, C.M.G., M.A., LL.B., LL.D., Prime Minister, Secretary of State for External Affairs, President of the Privy Council.

Hon. William Stevens Fielding, LL. D., D.C.L., Minister of Finance.

Hon. Jacques Bureau, LL. B., Minister of Customs and Excise.

Hon. William Richard Motherwell, Minister of Agriculture.

Hon. William Costello Kennedy, Minister of Railways and Canals.

Hon. George Perry Graham, Minister of Militia and Defence and Minister of the Naval Service.

Hon. James Murdock, Minister of Labor.

Hon. Raoul Dandurand, LL. D., K. C. Minister without Portfolio.

The deputation was introduced by J. Malcolm, M. P., Andrew Malcolm Furniture Co., Limited, Kincardine, Ont.

Following was the agenda of subjects and those who presented the statements in the case of each.

1. French Treaty. Joseph Picard, Rock City Tobacco Co., Limited, Quebec.

2. Canadian Customs Appraisal of Depreciated Currencies. W. H. S. Cane, Wm. Cane & Sons Co., Ltd., Newmarket.

3. Anti-dumping Legislation. R. P. Sparks, Sparks-Harrison, Ltd., Hull.

4. Marking of Country of Origin on Imported Goods. J. H. Fortier, P. T. Legare Co., Ltd., Quebec.

5. Taxation. J. F. M. Stewart, British Empire Steel Corporation, Toronto.

6. Preferential Tariff, Australia and Canada. J. B. Thomson, James Thomson & Sons Ltd., Vancouver, and on behalf of the Canadian Pulp & Paper Association by George M. McKee, Donnacona Paper Co. Ltd., Donnacona, Que.

7. "Produced-in-Canada" Train to France. Hon. C. P. Beaubien, Canadian Car and Foundry Co. Ltd., Montreal.

8. Bureau of Scientific and Industrial Research. Robert Hobson, Steel Co. of Canada Ltd., Hamilton.

9. Trade and Commerce Department. Angus McLean, Bathurst Lumber Co. Ltd., Bathurst, N. B.

The statements presented by the deputation on each of the foregoing subjects will be found on pages 51 to 54.

Fisheries Deputation Interview the Government

As the outcome of arrangements made by the Association with the Minister of Marine and Fisheries, an influential deputation representing the fishing industries of Canada waited on the Minister on Thursday, Feb-

ruary 23, and discussed with him ways and means of improving conditions in the industry. The deputation assembled in Ottawa on February 22 and its members were present at the Executive Council meeting. At this meeting it was decided to support the Canadian Fisheries' Association in its program. The deputation, among other matters, pressed strongly for the appointment of a deputy minister in the Department of Marine and Fisheries, who would be able to concentrate on work in the interests of the fisheries.

Personnel of Party Visiting the West Indies

On page 82A of the February issue there was published the itinerary of the West Indies trip being undertaken by a group of members of the Association. The party sailed from Halifax on February 15 and will be absent for about two months, touching at all the principal points in the British West Indies and visiting the Panama Canal as well. The personnel of the party is as follows, —

Mr. W. S. Fisher, Enterprise Foundry Co., Sackville, N. B. Manufacture—Tinware, oil tanks, laundry, camp and car stoves, stoves and ranges.

Sir Alexander and Lady Bertram, John Bertram & Sons Co. Ltd., Montreal. Manufacture—Iron working machines, lathes and presses.

Col. and Mrs. R. W. Leonard and Mr. Douglas Mutch, Coniagas Reduction Co. Ltd., St. Catharines. Manufacture—Silver bullion, white arsenic and copper sulphate.

Mr. G. Clifford McAvity and Mr. and Mrs. J. W. Davidson, T. McAvity & Sons, St. John, N. B. Manufacture—Brass and iron valves, locomotive supplies, steam fitters' supplies, cast iron pipe and fittings.

Mr. and Mrs. A. H. Stratton, Peterboro Review Co. Ltd., Peterboro, Ont. Printers and bookbinders, manufacturers of stationery, paper boxes, loose leaf ledgers and binders.

Mr. and Mrs. Geo. J. Lippert, Geo. J. Lippert Table Co. Ltd., Kitchener, Ont. Manufacture—Furniture.

Mr. and Mrs. R. H. Turner, J. J. Turner, Limited, Peterboro, Ont. Manufacture—Tents, awnings, sails, flags, lumbermen's and contractors' supplies, coal and feed bags, waterproof goods, horse blankets and camping goods.

Mr. and Mrs. H. Pocock, London Concrete Machinery Co., Limited, London, Ont. Manufacture—Concrete mixers, concrete working machines and contractors' working equipment.

Mr. and Mrs. C. H. Payne. (Mr. Payne is Secretary of the Commercial Intelligence Branch of the Department of Trade and Commerce of Canada.)

Col. Arthur Hatch, Canada Steel Goods Co. Ltd., Hamilton. Manufacture—Wrought hardware and cold rolled steel.

Mr James Anderson, Representing the Border Cities Chamber of Commerce, Windsor, Ont.

Mr. W. H. Shapley, Goold, Shapley & Muir Co. Ltd., Brantford. Manufacture—Pumps, engines, windmills, tractors.

Mr. H. V. Greene, Hiram Walker & Sons, Ltd., Walkerville, Ont. Manufacture—Alcohol and whiskey.

Mr. J. D. Johnson, Canada Cement Co., Limited, Montreal. Manufacture—Portland Cement.

Col. H. L. Edmonds, John Morrow Screw & Nut Co. Ltd., Ingersoll, Ont. Manufacture—Bolts, drills, nuts, screws.

Mr. W. J. Aitchison, D. Aitchison & Co. Limited, Hamilton, Ont. Manufacture—Wooden turned goods, boxes.

Mr. S. L. Gunn, The McClary Mfg. Company, London. Manufacture—Furnaces, enamelled ware, galvanized iron goods, ranges.

Mr. and Mrs. I. D. Bradshaw and Mr. W. J. Bradshaw, Bradshaw's, Limited, Toronto. Manufacture—Waxed paper.

Mr. Graham F. Towers, Superintendent Foreign Trade Department, Royal Bank of Canada, Montreal.

Mr. C. K. Howard, General Tourist Agent, Canadian National Railways and Canadian Government Merchant Marine, Ltd. In charge of Transportation arrangements.

Cables received from the party since their arrival in the West Indies indicate that their visit is creating a most favorable impression. On February 27, the party were in Kingston, Jamaica, where they were in touch with representative business men of the Island. In conference with the latter, it was pointed out that 30 per cent. of Jamaica's exports of bananas are consumed in Canada but that they reach Canada through the United States. The visitors urged direct shipment and also suggested that purchases of flour and other articles from Canada be made direct. The local business men advocated cheaper freight rates, improved steamship communication and a preference by Canada similar to that given to Porto Rico by the United States.

Ex-President McKinnon Speaks in New York

"Canada is coming to the front as an industrial country, and in due time will make a bid for the trade of the world."

The above statement was made by John S. McKinnon, S. F. McKinnon & Company, Ltd., Toronto, ex-President of the Canadian Manufacturers' Association, in the course of an address before the Canadian Club of New York, on February 25th.

The subject of Mr. McKinnon's address was "The Industrial Situation in Canada."

"As a manufacturing country", said Mr. McKinnon, "Canada is making solid progress. Canada is turning out manufactured goods today which before the War it had been considered could not be made in Canada."

Mr. McKinnon pointed out that Canada's exports of manufactured goods amounted to $17 per capita of her population, as against exports of $50 worth of manufactured goods per capita in the United States and he corrected the impression that Canada is chiefly a producer of raw material.

Mr. McKinnon's address made an excellent impression on the members of the Canadian Club, and was favourably commented upon in the New York papers.



Vancouver Manufacturers invade the East

This is a photograph of the members of the Vancouver Board of Trade, City Council and other commercial bodies, which went to Ottawa to press for equalization of press rates and other matters last month. Most of the party were members of the C. M. A. From left to right, they are R. P. McLennan, McLennan, McFeely Co., Ltd.; J. P. D. Malkin, W. H. Malkin Co., Ltd.; W. E. Payne, Secretary, Board of Trade; Mayor C. E. Tisdall; J. G. Anderson, Barr and Anderson, Ltd.; Ald. W. R. Scribbens; G. G. McGeer, counsel for Province of British Columbia; Hugh Dalton, Secretary B.C. Division, C. M. A.; H. Bell-Irving, Anglo B. C. Packing Co.; W. F. McClintock, Kelly Douglas & Co., Ltd.; F. G. Evans, Dominion Canners, Ltd.; J. R. Davison, publicity commissioner.

News from British Columbia Division

Headquarters of Division, 705 Board of Trade Building, Vancouver

Chairman.....J. B. Thomson, Jas. Thomson & Sons, Ltd., Vancouver
Vice-Chairman.....R. W. Mayhew, Sidney Roofing & Paper Co., Ltd., Victoria
Secretary.....H. Dalton

A LARGE delegation of the members of the British Columbia Division were in Ottawa during the latter part of February taking up with the government and the eastern members of the C. M. A. matters of importance to British Columbia. The western delegation twenty strong left Vancouver on Feb. 9, arriving in Ottawa on Feb. 14. Included in the number were Hon. John Oliver, Premier of British Columbia, J. P. D. Malkin, president of the Vancouver Board of Trade; J. B. Thomson, chairman of the B. C. Division of the C. M. A.; J. W. Fordham Johnson, president of the B. C. Sugar Refinery; F. G. Evans, manager of the Dominion Canners (B. C.) Ltd.; F. Smith of Smith Davidson and Wright, sales agents for pulp and paper manufacturers; W. F. McClintock, traffic manager for Kelly Douglas and chairman of the transportation bureau of the Board of Trade; R. P. McLennan, of McLennan, McFeely and Company; F. E. Burke of Wallace Fishe ies, Vancouver; J. H. McDonald of B. C. Manufacturing Co., New Westminister; A. E. Mason, Imperial Grain and Milling Company; T. S. Dixon of Gault Brothers; J. G. Anderson of Barr and Anderson; H. Bell Irving, of the Anglo B. C. Packing Company; A. H. Douglas of the Whalen Pulp and Paper Company; J. R. Davidson, publicity commissioner of the city of Vancouver; W. R. Scribbens, a member of the Vancouver City Council; J. A. MacDonald, representing the manufacturing interests of Nelson and the Interior; W. E. Payne, secretary of the Board of Trade; Hugh Dalton, secretary of the B. C. Division C. M. A.; and G. G. McGeer, K. C. representing the B. C. Government in its application to the Board of Railway Commissioners for the abolition of the fifty per cent discriminatory mountain scale freight rate.

The delegation visited the capital for the main purpose of supporting Mr. McGeer in his application before the Railway Commission which commenced its hearings on Wednesday, February 15th. More than a week was occupied in the taking of evidence by the commission, the first two days being occupied by the C. P. R. which is opposing the application for the equalization of rates, and the greater part of the remaining four days being taken up by the counsel for B. C. in cross-examination of the C. P. R. and C. N. R. officials, and in entering evidence from several members of the western delegation. In view of the large amount of statistical data that the railway companies entered, especially the C. P. R. in regard to operating charges and relative costs of operating the B. C. lines as compared with the lines on the prairies, Mr. McGeer was granted an adjournment for three weeks in order that he might have time to study the figures that had been put in by the railways. The resumed hearing will commence on March 13th, when arguments will then be given on the reasons why the mountain scale of rates should be abolished and B. C. put as nearly as possible on the same footing as other provinces in the Dominion. The majority of the members of the B. C. delegation left Ottawa on Feb. 23rd and 24th for the West.

Preferential Tariff with Australia

On February 16th in Ottawa a party of members of the British Columbia Division, comprising J. B. Thomson, Chairman of the B. C. Division, J. P. D. Malkin, J. W. Fordham Johnson, A. H. Douglas, H. Bell-Irving, W. E. Payne, Secretary of the Vancouver Board of Trade and Hugh Dalton, Secretary of the B. C. Division, interviewed the Hon. Senator Geo. F. Pearce, Minister of Home Affiairs in the Australian Government, in regard to securing for Canadian products preferential tariff treatment on importations into Australia, with particular reference to such important B. C. commodities as lumber, box shooks, fish and pulp and paper. While in Ottawa Senator Pearce interviewed various members of the Cabinet in regard to negotiating a reciprocal tariff between Australia and Canada to cover the various commodities produced in the respective countries, which it is thought would be more freely exchanged under a preferential tariff. The Australian market is an important one for British Columbia manufacturers, and the B. C. members who interviewed Senator Pearce are hopeful that the two Governments will, in the near future, be able to arrive at a mutually satisfactory arrangement, possibly along the lines of that already in effect between Canada and New Zealand and which has been such an important factor in establishing the large volume of business now being done between those two countries.

Fish Canners Foregather

A "Fish Day" banquet, under the auspices of the British Columbia Canners' Association, was held at the Hotel Elysium, Vancouver, on February 1. Fish men to the number of about 150 were present and, with the exception of the dessert, every item on the long menu card consisted of fish, thus proving how extensive is the variety of the products of the North Pacific. Frank Burke, president of the Association, presided and with him at the head table were Hon. William Sloan, minister of mines and commissioner of fisheries in the provincial government; A. L. Hager, Canadian Fisheries Association; H. B. Bell-Irving, Frank Millerd, Major Motherwell, inspector of fisheries; Mayor Tisdall of Vancouver; M. Freeman and C. W. Frazee.

In his opening remarks, Mr. Burke referred to the growing importance of the fish industry, one person in every 26 in Canada to-day being directly dependent on it for his living. The industry was reponsible for curtailing unemployment and, in the last resort, lessened the taxpayer's burden. At the same time it was heavily taxed and its profits were far smaller than was popularly believed.

Hon. Mr. Sloan dealt with the objects of "Fish Day", emphasizing the vlaue of fish as a nourishing article of food. He produced statistics to prove that British Columbia was the banner fish province of the Dominion, having about one-half the fisheries wealth of Canada. Referring to the salmon industry, he expressed alarm at the way in which the supply of salmon was decreasing and showed how protection could only be obtained through co-operation by the State of Washington. Hitherto efforts to secure enactment of a treaty with the United States had failed. Mr. Sloan also pointed out that the northern salmon fisheries were also in danger and expressed the hope that the new federal government would take steps to preserve the industry.

Speeches were also delivered by Mayor Tisdall, Al. Hager, M. Freeman, Major Motherwell and H. B. Bell-Irving.



Box Manufacturers' Grand Challenge Trophy

Handsome Cup put up by the Box Manufacturers' Section of the B. C. Division for competition among the fruit growers of the Province. The base is a reproduction in oak of a standard peach box, 18 inches long, 11½ inches wide and 4 inches deep.

Order Placed in Canada

Largely through the instrumentality of the British Columbia Division, a large order for wooden conduit piping being placed recently by the B. C. Telephone Company was retained in Canada. It had been intimated that the company had intended to place the order in the United States. The Vancouver office of the C. M. A. at once took action and such representations were made as induced the B. C. Telephone Company to award the contract in British Columbia. The order is for over 15 miles of conduit, which will require more than 250,000 feet of lumber.

Activities of the Month in Prairie Division

Headquarters of Division, 408 Avenue Block, Portage Avenue, Winnipeg

Chairman.....W. G. Fraser, Beaver Soap Co., Ltd., Winnipeg.
Vice-Chairman.....J. W. Ackland, J. D. Ackland & Sons, Winnipeg.
Secretary.....G. E. Carpenter.

AT a meeting of employers of Saskatchewan held in the Board of Trade Rooms, Regina, on Feb. 7th, 1922 the request of the Trades and Labor Council for 100 percent workmen's compensation to be administered by a state board was considered.

The employers who covered all parts of the province felt that labor's demands were unreasonable, in that they were far in excess of the provisions of workmen's compensation acts in other provinces and that it is not considered an opportune time for a province like Saskatchewan to be expected to go beyond those benefits. The meeting at the same time expressed itself in favor of the principle of a state board compensation act as administered in other provinces.

Among other proposals which the employers discussed were a minimum indemnity of $150.00 for funeral expenses of dead workers; compensation to widows of $15.00 a month with $10.00 for each child, 100 percent wages for 90 days to disabled workers and 75 percent wages for the remainder of their disabled period; 75 percent of the loss of earning power of workers partially disabled, temporarily or permanently; medical and hospital expenses to the victims of accidents; protection of child labor; protection against unemployment and representation of labor on government boards.

It was contended that should the request for any greater compensation than is already provided for in other provinces be even partially acceded to, it would simply mean that the people of Saskatchewan would have to pay more for work done in the province than the people of sister provinces.

The result of several meetings at which G. E. Carpenter, Secretary of the Prairie Division, was present, of manufacturers and representatives of builders' exchanges from all parts of the province and other employers was that a committee of three was appointed to interview the Premier. They found, however, that the energies of the Government were all occupied in getting through "supply" and closing the session, and that nothing could be done this session.

A committee was appointed to follow this matter up and be prepared to suggest a bill to the Legislature before the next session.

Employers' Association for Edmonton

An organization meeting, was held last month in Edmonton, Alberta for the purpose of forming an employers' association in order to combat proposed drastic labor legislation against employers. G. E. Carpenter, Secretary of the Division, was present at several meetings when this matter was discussed previously and is expected to take active part in the work of organizing.

Joint Council of Industry Manitoba.

The report of the Joint Council of Industry for 1921 tabled in the Manitoba Legislature shows that during the year thirty-six cases of dispute have been dealt with and in thrity-two cases the Council was able to effect a settlement of the dispute. In two of the remaining cases the employees declined to accept the finding of the Council but after a cessation of work of greater or less duration were forced to accept less favorable terms than they had demanded.

In the report reference is made to several instances in which the Council emphasized its insistence upon the binding nature of agreements.

Reference is also made to investigation conducted by the council in regard to: cost of living, labor turnover, labor legislation, profit sharing systems, wages, production costs, unemployment and apprenticeship and industrial education.

Improved Western Conditions

An improvement in conditions throughout the West generally is looked for if the additional wealth available as a result of the 35c increase in the price of wheat is maintained.

Western Canadian farmers on the basis of recent advances in the wheat prices stand to realize about twenty million dollars more out of the 1921 crop than appeared possible at the time the slump in prices had reached the lowest level in December.

There are about seventy million bushels of wheat still in the hands of farmers to be sold, it is estimated.

A Muskrat Industry

The North Alberta Rat Farms Ltd. have recently been organized into a company with a capitalization of twenty thousand dollars and head quarters at Edmonton. The farm itself, however, it is understood, will be in the Peace River District. The proposition is to raise muskrats and sell them, and the papers of incorporation provide for manufacture or other disposition. As this fur is ever in strong demand it is hoped that the venture will be a paying proposition.

Wool Growers Company

The first annual meeting of the Manitoba Wool Growers Ltd., composed of the wool raisers of the Province, was held on Feb. 10 in the Majestic Hotel, Winnipeg. The Company plan to build a woollen mill in Winnipeg, fabricate the raw material into yarns and cloths and appropriate as much of the local market as they can.

The delegates at the meeting seemed quite positive that the Manitoba Government would render them assistance and it was stated that several manufacturing experts were ready to lend a hand and that a complete mill equipment was available for shipment from the East.

"We, Ourselves the Better Serve by Serving Others Best".

On the Quai de Passy in Paris stands a little cafe with a witty window announcement, in the language of the land, which informs the observant that "On est mieux ici qu'en face," (One is better off here than opposite). When one glances opposite, the alternative is—the river. And so it is with membership in the Association. Every other day manufacturers are getting in out of the "wet" and Winnipeg now scores 100 percent membership.

We extend the glad hand to the following new members:

Standard Cigar Company, Winnipeg.
Montreal Cloak Co. Ltd., Winnipeg.
Munroe & Bethune, Winnipeg, Man.

Getting Tegether.

The trend of feeling at a recent meeting of members of the Prairie Division was that, "When good fellows get together," good business can be done. Arrangements are therefore under way to have a series of dinners and luncheons at regular intervals so that from time to time a sociable half hour, a good "feed" and a free-for-all business discussion on the leading problems of the manufacturing world, may be profitably and comfortably enjoyed.

Under the careful management of W. Gordon Fraser, genial chairman of the division, these gatherings should be an aid and an inspiration and will lead to a better understanding of the other fellow's problems, closer affiliation and co-operation with the Association, and very material benefit will result to all manufacturers in the Prairie Provinces.

Freight Ruling of Importance

An important decision affecting Alberta was handed down by the Board of Railway Commissioners recently when they refused to grant the application made by the railway companies of the Dominion to increase the earnings at stations where an agent is employed, from fifteen thousand dollars per year freight outward, to twenty-five thousand dollars per year, and from two thousand dollars per year freight inward to four thousand dollars per year.

The application was made on April 18th, 1921, during the session of the Railway Commission held in Calgary.

The effect in Alberta will be that the present rate will stand which will allow any point that can provide freight up to fifteen thousand dollars outward annually and two thousand dollars inward, to demand and have provided a railway station.

In a new country like Alberta, the decision of the railway commissioners is of paramount importance.

Edmonton Takes Census

A census of all the manufacturing establishments of Edmonton is being taken by the Board of Trade and Chamber of Commerce. It is the intention of the Board to issue a booklet containing a classified list, with brand names, of all the commodities manufactured in Edmonton and to carry on an intensive publicity campaign to stimulate local loyalty to locl industry. Tentative plans are also being laid for the holding of a "Made-in-Edmonton" exhibition in the spring

Minimum Wages in Alberta

The Government of Alberta decided to pass a minimum wage bill at the session of the Legislature which opened on Feb. 2nd. The bill was introduced by the Honorable Mrs. Parlby, Minister without Portfolio, and provides for a board consisting of one representative of the workers; one of the employers and a chairman, to be appointed by the Government, to decide minimum wages for female workers. The bill provides for a conference by an equal number of workers and employers in a given line to be presided over by the chairman of the board, who shall not vote.

Prior to the introduction of this bill the Secretary of the Prairie Division visited Alberta, and after a conference with manufacturers, retailers and other employers was able to secure such amendments to the bill as will, it is hoped, make it prove workable and satisfactory to the employers as well as the workers of the Province of Alberta.

"If the Fordney tariff remains in force, our power to buy from the United States will be curtailed accordingly, and we must in self-protection put every possible obstacle in the way of our people buying from that country the commodities for which we are thus rendered unable to pay."—Sir Edmund Walker at annual meeting of Canadian Bank of Commerce, Toronto, Jan. 10, 1922.

Ontario Division's Activities for the Month

Headquarters of Division, Bank of Hamilton Building, Toronto

Chairman.....W. C. Coulter, Booth-Coulter Copper and Brass Co., Ltd., Toronto.
Vice-Chairman.....A. W. White, Geo. White & Sons Co., Ltd., London.
Secretary.....J. M. McIntosh Travelling Secretary.....O. C. Pease.

OWING to the increasing pressure of the work in the Legal Department of the Association, it has been deemed advisable to relieve the Legal Secretary, H. Macdonald, of the duties appertaining to the offices of Secretary of the Ontario Division and Secretary of the Toronto Branch, which he has undertaken in conjunction with the former position ever since the Ontario Division was formed. Mr. Macdonald will from now on devote himself exclusively to the work of the Legal Department, the services of which will be correspondingly strengthened.

The positions of secretary of the Ontario Division and secretary of the Toronto Branch have been filled by the appointment of J. M. McIntosh, hitherto secretary of the Trade Sections Department, and Mr. McIntosh will continue to look after both branches of the work. He has had a long connection with the staff of the Association and is well posted on all the details of Association work. For several years prior to the war he filled the position of secretary of the Toronto Branch. He served with the forces overseas during the war and on his return was appointed secretary of the newly-formed Trade Sections Department, which is filling a useful place in the activities of the Association.

Opening of Legislative Assembly

On Tuesday, February the 14th, the third Session of the 15th Legislature was opened with the usual ceremonies by His Honour Colonel Henry Cockshutt, newly appointed Lieutenant Governor. Members of the Association have noted with satisfaction that one of its past presidents, so well and favorably known to all those engaged in industrial and business activities, has been appointed to such a distinguished office. In the short time that he has occupied this office the hospitality of Government House has become well known, and all members of the Association will join in extending to him their sincere congratulations and best wishes. In the speech from the Throne important legislation was forecast.

Marketing of Agricultural Products

Better facilities for the marketing of farm products form part of the Government's program, it being felt that the success of the organization for selling fruit justifies the application of the principle in a more comprehensive manner in the future. Any arrangements which may simplify the distribution of farm products, provided such arrangements are compatible with sound business principles, may be expected to be of value to the public interest.

Labor Legislation

The Hon. W. R. Rollo, Minister of Labor, attended the third International Labor Conference at Geneva in an advisory capacity. At this conference discussions were held and recommendations made with a view to improving labor conditions by international agreement. The House was invited to improve and develop legislation along lines already undertaken, the results of the conference being held for future and more mature consideration.

Hydro Electric Railway

The speech forecasts a discussion on hydro radials. In view of the large expenditures involved in power developments and the restraint already placed upon certain expenditures connected therewith, it is likely that the discussion on this subject will be particularly keen, and out of this discussion possibly some permanent and more definite policy may be evolved.

James Bay Railway

A contract for the extension of the Temiskaming and Northern Ontario Railway in the direction of James Bay, authorized by the House some two years ago, has been awarded, the object of this extension being to open up for settlement the areas not now reached by any system of transportation.

Other subjects indicated by reference thereto in the speech from the Throne are bills to amend existing insurance legislation and the Mechanics' Lien Act. All legislation will be carefully watched and members of the Division will be advised thereof by the Legal Department of the Association as necessity may require.

Membership Work

A determined effort is being made this month to increase the membership of the Division. A large number of prospects have received a circular letter over the signature of W. C. Coulter, Chairman of the Division, in which he appeals to them as fellow manufacturers to join the Association.

In addition to this the Chairman has asked members to do their utmost to secure at least one member by personal canvass and very encouraging results are expected. As in any place of business, the personal touch seems to have a greater effect than any other kind of solicitation and it is with this in view that the present requiest has been made.

It is early yet to forecast results as this page goes to press before many replies can be received, but present indications are that the membership of the Association will be strengthened.

J. S. McKinnon Addresses Hamilton Luncheon

J. S. McKinnon, past president of the C. M. A., was the guest of the Hamilton Chamber of Commerce at a luncheon on February 17. He delivered an interesting address on "The Industrial Situation in Canada," reviewing conditions at the present time and discussing some of the problems confronting industry. The trend of his remarks may be summed up in the concluding paragraph of his address,—

"When trade was booming many people appeared to think that the boom would last forever. Some, rather foolishly, laid their plans on this assumption, with results of an unsatisfactory nature. Similarly, it is easy to meet with traders today who seem to believe that bad trade will endure for a period of great length. Buyers, however, who frame their policy according to such a theory are not unlikely to be caught short of stock when demand revives. In the opinion of many well-informed business men, a substantial improvement in trade may be looked for. There are signs of a better tone in many of the markets. I do not suggest a speedy return of boom conditions. That cannot be expected until some important economic problems are solved. The wave of depression is world-wide, and is by no means confined to the countries impoverished by the war. United States, enriched as a result of the war, has a serious unemployment problem and a bad trade stagnation. Demand, however, cannot be held up indefinitely, and before very long orders will probably flow in welcome volume once again. The fact that the public has not been purchasing freely during the past year suggests that there will be a huge demand to satisfy when requirements have to be met. It is, of course, a wise policy on the part of a buyer to follow the path of safety, but at the present juncture it is questionable whether it will be safe to defer buying in ample quantities much longer. It may be too late to replenish stocks when the trade revival comes, and there is no reason to look for lower quotations than prevail at the present time."

Hamilton Secured 24 New Industries in 1921

In view of all the unfavorable conditions surrounding manufacturing industry last year, the report for 1921 presented to the mayor and board of control of Hamilton by C. W. Kirkpatrick, commissioner of Industries and Publicity, was an encouraging one. Twenty-four new industries commenced operations, while at least four other companies located their headquarters in Hamilton, with the intention of starting manufacturing as soon as conditions warrant. Ten of the new industries are of United States origin, while the balance are financed by either local or other Canadian capital. The new industries are as follows:—

Canadian Horseshoe Co.	Horseshoes.
Canadian Coffield Motor Washer Co.	Motor Washers.
Canadian Oakville Co.	Dome Fasteners.
Fuller Brush Co.	Brushes.
Soy Products Co.	Soy Bean Porducts.
Universal Milking Machine Co.	Milking Machines.
Wallace Barnes Steel Spring Co.	Horseshoes.
Ace Chain Co.	Auto Chains.
Cooperage Co. of Canada.	Barrels and Kegs.
McIntosh Granite Co.	Monuments.
International Oxygen Co.	Hydrogen and Oxygen.
Rexhide Leather Products.	Leather Specialties.
Eley Bros.	Knitted Goods.
Brant Ice Cream Co.	Ice Cream & Confections.
Teya Mfg. Co.	Ice Cream Cones.
Collins Never Fail Products	Poultry House Supplies.
Chadwick-Carroll Brass Co.	Brass Goods.
E. B. Ratcliffe Ltd.	Cement Products.
Canadian Chick Hatcheries.	Incubator Chicks.
Superior Engraving Co.	Half-tone Engravings.
National Slag Products Co.	Tile, etc.
Coulter Wood Products.	Wood Products.
Farr & McManus.	Furniture Mfrs.
International Pattern Works.	Patterns.

Note:—The Companies that have established their headquarters here but have not yet commenced manufacturing operations are:—

Kanadda Biscuit Co.	Biscuits and confections.
Triumph Motor Equipment Co.	Motor Equipment.
Wigham Wire Co.	Wire Products.
Peninsular Cord Tire & Rubber Co.	Tires and Rubber Goods.

Mr. Kirkpatrick notes that there was considerably less industrial building during 1921, permits totalling only $289,000, compared with $1,412,400 for the preceding year. This was largely due to abnormal conditions, though a strike in the building trade was a contributing factor. General business conditions made manufacturing space more easily obtainable with the result that newcomers were able to get satisfactorily located, temporarily at least.

During the year, the Department had correspondence or other negotiations with 495 prospective locators, the great majority being American manufacturers. While these negotiations met with only limited success, more than 100 live prospects were carried over to 1922.

News of the Month from Maritime Division

Headquarters of Division—Amherst, Nova Scotia

Chairman.....L. W. Simms, T. S. Simms & Co., Ltd., St. John, N.B.
Vice-Chairmen.....C. S. Sutherland, Amherst Boot and Shoe Co., Ltd., Amherst.
J. A. Marven, J. A. Marven, Limited, Moncton, N.B.
J. E. McLurg, Halifax Shipyards, Limited, Halifax, N.S.
Secretary.....H. R. Thompson, Box 470, Amherst, N.S.

THE coal miners of Nova Scotia are very much dissatisfied with the majority report of the Conciliation Board, appointed by the Department of Labor, to enquire into and make recommendations regarding the proposed wage cut announced by the coal operators, and by a referendum vote have decided to reject the award. A district convention is being called to decide what further action shall be taken.

The award recommends rates of pay from five to ten per cent higher than those that the operators announced were to be effective January second, but the coal companies have expressed their willingness to accept it.

The following resolutions are illustrative of the present state of mind of the employees in the coal districts:

Resolution

"WHEREAS, it is the aim of those in control of politics, industry and finances to prevent Bolshevism from spreading in Canada, and,

"WHEREAS, Bolshevism is the effect of oppression and tyranny on the part of those in control, as Bolshevism finds no soil to grow in a community of working people who have employment at an adequate wage, and,

"WHEREAS, the British Empire Steel Corporation and its servants, the Hon. W. L. M. King, Hon. James Murdock, Minister of Labor, and U. E. Gillen, are oppressing the mining population beyond the endurance of men to bear,

"The Harbor Local 4523, United Mine Workers of America, hereby declares that if Bolshevism spreads and gets a firm hold in the mining regions of Nova Scotia, the blame can be directly placed upon Hon. W. L. McKenzie King, Premier of Canada, and upon the Minister of Labor, Hon. James Murdock, because of their hostility to the welfare of the people of Canada in their servile obedience to frenzied financiers of the Biritish Empire Steel Corporation."

Resolution

"WHEREAS, the Hon. W. L. MacKenzie King, in Sydney, declared that the British Empire Steel Corporation has nothing to fear from him, and

"WHEREAS, the British Empire Steel Corporation has instituted a policy of merciless oppression, and

"WHEREAS, the Premier, in pursuance of his policy of befriending stock gamblers who are desperately striving to wring dividends out of miners who are reduced below the hunger line, has placed Jas. Murdock in the position of Minister of Labor, and

"WHEREAS, Jas. Murdock in his hostility to the great mass of laboring people of Canada has placed U. E. Gillen, a corporation tool, on a board of conciliation for the purpose of grinding the faces of the poor, and

"WHEREAS, U. E. Gillen to befriend the Huns of Canada has signed an unjust and starvation wage award,

"THEREFORE, Mechanics' Local 4522, U. M. W. hereby declare Hon. W. L. King, Hon. James Murdock and U. E. Gillen are the agents of the Huns of Canada and the enemies of the people of Canada."

Bonus for Reforestation

In order to encourage reforestation in Nova Scotia, Frank J. D. Barnjum of Annapolis Royal, N. S., is offering a cash bonus of $2.00 per acre to the farmers of Nova Scotia for every acre of spruce or pine seedlings planted by them on their farms the coming spring of 1922, no one farmer to be paid a bonus on more than 100 acres, so as to distribute the plantings as widely as possible over the Province. Location and method of planting must be approved by the Government Forester of Nova Scotia if one is appointed, otherwise by Mr. Barnjum's forester in order to insure satisfactory results.

Gypsum Development

Announcement has been made to the effect that the Eastern Gypsum Company Limited, owners of extensive gypsum deposits in Cape Breton, N. S., have sold these areas to a syndicate of American capitalists who are organizing a Company known as the Great Bras D'Or Gypsum Company Limited, and that development on a large scale will be undertaken this summer, a sum of about $200,000 being appropriated for this purpose. The intention is to quarry and establish a calcining plant, the products of which industries there is an ever increasing demand for.

The extent of the deposits can be judged by the report of W. F. Jennison, E. M., who was engaged by the Government to survey the gypsum deposits of the Dominion. He states that the property contains approximately 268,000,000 tons of the mineral above drainage levels and ideally located for economic development and transportation.



Alex. Wilson
President and Managing Director, Wilson Box Co., Limited, St. John, N.B.

Accident Prevention

During the present depressed business conditions, when many industries are closed down, and the operations in others seriously curtailed, it is very difficult to devise ways and means of keeping up the interest of the employees in "Safety First".

This problem has been receiving the consideration of the Nova Scotia Accident Prevention Association, which organization has decided to institute a competition, in the higher grades of the schools throughout Nova Scotia, in essays on "Principles and Application of Safety First". The essays are to be written at home and to be vouched for as the work of the students who are submitting them, the pupils however may receive assistance or information from any source while preparing the work. It is the intention to ask prominent local employers to donate the prizes in order that local interest may be developed. The principals of the schools are being requested to pass preliminary judgment on the essays and forward the best five to the Association which will finally decide the prize winners. Seventy-five per cent of the value will be estimated on facts, fifteen on composition, and ten on appearance.

By having the essays written at home, it is hoped that the interest of the parents will also be enlisted and in this way reach the present employees of industry, as well as the future ones.

Chairman of Box Section

Alex. Wilson, whose portrait appears on this page is chairman of the Maritime Box and Box Shook Section—is popular with the trade and takes a keen interest in everything appertaining to the industrial development of the Maritime Provinces and of Canada as a whole. He is an elder in St. Andrew's Presbyterian Church, an officer of St. Andrew's Society,—one of the oldest Scottish organizations in Canada—historian of the St. John Rotary Club; treasurer of the South End Improvement League, which takes a special interest in the boy life of the city, and a director of the Y. M. C. A. He is also a member of the St. John Canadian Club, Art Club, and Natural History Society.

The Company of which he is managing director, started out in a very small way in 1910, but since then, under his able and energetic management, it has developed until it now owns and operates three sawmills in addition to the large box factory at Fairville.

Mr. Wilson is looking to the future with optimism and expects that with the proper steamship service—between Canada, Cuba and Mexico, which is now being planned, the Dominion will be in an advantageous position to develop export business in box shooks with Cuba and Mexico.

A Directory of Hamilton Manufacturers

For the past few months, the Department of Industries and Publicity has been compiling a complete list of Hamilton manufacturers and articles manufactured in Hamilton, with a view to issuing a Hamilton directory or trade index and, if the necessary money is available, this book will be issued in the spring.

International Nickel Company's Plans

James L. Ashley, secretary-treasurer of the International Nickel Company, New York, referring to reports which appeared last month in the daily press to the effect that the management of the company had decided to dismantle the plant at Bayonne, N. J., and move the machinery and equipment to Port Colborne, Ont., concentrating refining operations at the latter plant, states that,—

"The company is considering the matter of increasing the output at its Port Colborne plant but is not prepared at this time to discuss the abandonment of its Bayonne, N. J. refinery."

This Month's Activities in Quebec Division

Headquarters of Division—113 Board of Trade Building, Montreal

Chairman.....J. H. Fortier, P. T. Legare, Ltd., Quebec.
Vice-Chairman....F. W. Stewart, Cluett, Peabody & Co., of Canada, Ltd., Montreal.
Secretary.....R W. Gould.

AN enthusiastic meeting of the Executive Committee of the Quebec Division was held in the city of Three Rivers on Monday, February 27th. It was largely attended by the members of the Three Rivers Branch, together with large delegations from Montreal and Quebec.

The question of amendments to the Bankruptcy Act was discussed and Louis Letourneau, M.P.P. for Quebec, ex-chairman of the Quebec Branch, spoke at some length on the subject. It was pointed out that many abuses of the Act had sprung up during its term of operation in the province. It was decided to take such action as might be considered necessary and appeal to the Legislation Committee to look into the matter carefully, and enquire whether or not other provinces were experiencing the same conditions under the present Bankruptcy Act as was the province of Quebec. Other matters of importance discussed were Workmen's Compensation Act, re-organization of the headquarters office of the Quebec Division, etc.

Montreal Branch Meeting

An interesting meeting of the Montreal Branch of the Quebec Division was held on February 17th. A report upon the Workmen's Compensation Act of the province of Quebec was taken up and the recommendation of the special committee to allow the entire matter of amendments to the act to stand as they are at present was accepted. The provincial government has stated that no new features will be introduced into the act this year.

Among other matters discussed were additional executive assistance in the divisional headquarters, increased rentals in the city of Montreal, amendments to the sales tax act, unemployment situation, organization of industrial research bureau, metering of sprinkler systems, bankruptcy act, etc.

Twenty-one new members were received into the membership of the association for the Quebec Division.

Quebec Members at Ottawa

The Executive Council meeting held in Ottawa on Wednesday, February 22nd, was largely attended by members of the Quebec Division. Among those present were J. H. Fortier, Chairman of Quebec Division; B. W. Coghlin, Chairman of the Montrea Branch, together with Joe Picard, Quebec; Jean Rolland, St. Jerome; E. C. Budge, F. R. Whittall, F. W. Stewart, Vice-Chairman, Quebec Division; A. H. Brittain, J. McKee, President, Pulp & Paper Association; Paul E. Joubert, J. A. Lapres, W. H. Miner, Jos. Daoust and others.

The representatives of the Quebec Division were quite enthusiastic as to the success of the meeting, and remained over for Thursday, the 23rd, when they joined the deputation calling upon the Prime Minister and the members of his Cabinet, to dicuss matters of federal legislation.

Export Club Activities

The Export Club of Montreal and District has been particularly active during the past month. Weekly meetings have been held by the executive and on March 3rd, a general meeting of the club was held. Arrangements were made with H. R. Pousette, director of the Commercial Intelligence Branch of the Department of Trade and Commerce, to bring to Montreal two moving picture films taken by the department which have to do with export business. These were shown at the meeting and an interesting programme of export discussion was arranged.

A long conference was held during the month with Pierre Hudicourt, a lawyer of Port au Prince, Haiti, together with C. P. R. officials on the question of greater trade relations between Canada and the republic of Haiti. It was shown during the conference that the island of Haiti imports nearly nine million dollars worth of cotton and manufactures thereof per annum: over five million dollars worth of flour; foodstuffs to the value of some four millions of dollars; nearly a million dollars worth of steel, iron and manufacturers thereof; about half a million dollars worth of leather and tanned skins; $150,000 worth of cement was also imported and chemical products to the extent of $140,000.

Of exports she had exported coffee to the value of $10,500,000 and log wood or dye wood had been shipped out of the country to the extent of $2,500,000. The political condition in Haiti is such at the present time, said Mr. Hudicourt, that his country was anxious to trade with Canada and did not feel well disposed toward trading with the United States.

The entire subject of trade with Haiti was discussed by those present and Mr. Hudicourt and Mr. Angell, one of the C. P. R. solicitors in New York, have promised to prepare reports in detail on the outlook for trade expansion between Haiti and Canada.

A Good Export Story

During the conference which was held some days ago between the Executive of the Montreal Export Club, Canadian Pacific Railway officials and prominent citizens of the Republic of Haiti, a clever story was related by A. B. Calder of the C. P. R., which pointed a moral to exporters of Canada, and which I think will bear repetition here.

Cold type is not sufficiently eloquent to tell the story as Mr. Calder told it, but the sense of the tale is as follows:—

During the fair in Seattle, when Mr. Calder was there in the interest of the C. P. R. late one evening an Englishman entered his office anxious for an interview. After discussing for a moment the manufacturing outlook, he remarked, "You know, a chap is more or less useless when he does not have a hobby." Mr. Calder admitted it. Continuing, he said, "My hobby, by the way, happens to be time pieces. Wherever I go I enter the jewelry stores and examine time pieces. In Seattle I find American watches, Swiss watches, French watches, but not a single English time piece, don't you know. I find the same condition maintains in New York, Chicago and even in Montreal and Toronto."

"Perhaps the English makers cannot compete in price," suggested Mr. Calder.

"Oh, yes, we can sell more cheaply," returned the Englishman, "but, of course, we would not think of making the silly patterns that the people on this Continent demand in their time pieces." The Englishman continuing, said—"This reminds me of a jolly peculiar thing which happened in another line of ours. We have been shipping for the last three years to India our porcelain egg cups, and for three years the Oriental hen has persistently refused to lay an egg the proper size to fit our egg cups."

It is unneccessary to point out the export moral of the tale, and I felt that it would be well if INDUSTRIAL CANADA passed the story along to others who are in the export game.

Free Sites and Exemptions

On January 21, a delegation representing boards of trade, power companies and real estate interests in the province of Quebec waited on Premier Taschereau and asked that municipalities in the province be permitted to grant free sites and exemption from taxation to prospective manufacturers. Complaint was made that Quebec was placed at a disadvantage by reason of these restrictions, especially in competition with Ontario. Premier Taschereau stated definitely that he would ask Ontario to put an end to the favors given or, failing to secure this, would repeal the statute forbidding such offers being made. Bonuses, however, would not be allowed.

Campaign for New Members

The Quebec Division has just entered upon a spring "Round-Up" campaign for new members.

The plan to be followed this year differs in some respect from those followed in previous campaigns. In the first place, a general letter is being sent to all non-member manufacturers in the province, pointing out that the Association is engaged in protecting **all** manufacturers against excessive taxation, improper legislation, unfair foreign competition, and the importunities of other organized bodies which neither appreciate nor understand the manifold difficulties which confront the Canadian manufacturer. On this account, therefore, a strong invitation is being extended in this letter to all non-members to affiliate themselves with the Canadian Manufacturers' Association.

Following this, a list has been arranged of carefully chosen prospects. These have been divided into pairs,—the prospects in each pair being selected with regard, as far as possible, to their proximity one to another. These pairs of prospects, then, are being allotted to certain active members of the Association who either possess personal knowledge of the manufacturing concerns allotted to them, or whose place of business is in their vicinity.

The first stage of the campaign includes a general letter to key-members in all centres throughout the Province, enclosing a list, in each case, of local members and non-members. The members written to, in this case, are being asked to organize their fellow associates, and to allot, to each of the latter, one local prospect.

To summarize,—this form of campaign means that each non-member manufacturer is receiving a direct invitation to join the Association,—that certain non-members who are known to be sympathetic will be called upon by a member who is either personally interested in them or who is a neighbor; and finally that, as far as possible, each non-member in the province will be called upon by a representative of the Association and personally invited by him to join the central organization of industry in Canada.

To our provincial members we offer the earnest suggestion that no opportunity ever be lost to urge a non-member manufacturer to come into their association. It is only through co-operation of this kind that our manufacturers in Canada can best protect their mutual interests, and bring about an early stabilization of Dominion-wide conditions.

* * *

Beveridge Supply Co., Limited, Montreal, report that they have recently shipped a repeat order from Halifax to British Guiana.

Trade Associations hold Annual Conventions

Well organized meetings held by Pulp and Paper, Boot and Shoe, Furniture and other trade bodies.

WITH the strengthening of the organizations into which the manufacturers engaged in the principal branches of industry in Canada have formed themselves, the annual meetings of these trade associations have become important fixtures in the calendar of industrial events. Each year sees these conventions taking on a more comprehensive and permanent character, bringing together larger numbers of members, increasing the scope and value of discussions and introducing a greater variety of new features.

All these trade associations are more or less closely allied with the Canadian Manufacturers' Association. In some cases they form definite sections of the C. M. A. In others, while not directly associated, the fact that practically all their members are also members of the C. M. A. brings the trade association into intimate relations with the larger organization. Officials co-operate whenever possible and friendly relations exist among the various staffs.

Since the first of the year several of the trade associations have held their annual meetings and the following reports, outlining the chief features of each, have been prepared for INDUSTRIAL CANADA by the secretaries.

Canadian Pulp and Paper Association

By Edward Beck

Secretary and Manager, Canadian Pulp and Paper Association

AN outstanding feature of the annual meeting of the Canadian Pulp & Paper Association, held in Montreal in the latter part of January, was an address given at the annual dinner by the Hon. James S. Robb, M.P., Minister of Trade and Commerce, in which the minister spoke rather emphatically of Canada's ability to hold its own in international trade whether or not its chief customer, the United States, made it difficult or easy for us to trade with that country. Canada, the minister intimated, was very far from inviting or desiring a trade war with our American neighbors and could sympathize with them, to a degree, in their efforts to protect their own trade interests, but nevertheless, if put to it, the Dominion would be found equal to any task imposed upon its people and if we were obliged to seek and find markets denied to us in the States, undoubtedly we would be able to do it. The minister made special reference to the growth and development of the pulp and paper industry during the last decade and intimated that not enough credit for this growth and development had been accorded to the reciprocity pact which had been negotiated by the Laurier Government but rejected by the country in 1911. This agreement provided for the free entry of cheap printing paper from Canada to the United States and later when the agreement had been rejected by Canada and was subsequently wiped off the statute books of the United States the provision in regard to free paper was permitted to remain and has since been incorporated in the new tariff laws of that country.

Mr. Robb's address attracted a lot of attention. His references to Canada's economic and industrial independence were considered especially pertinent in view of the fact that his audience included a number of representative American manufacturers, who showed their understanding and appreciation by their applause.

The ninth annual meeting of the Association proper brought out the fact that this industry is on the upgrade and has enjoyed a notable expansion even in the last year, despite the process of liquidation through which its markets have been passing.

"In regard to the future, our industry may be said at least to be no worse off than any other," said P. B. Wilson, Spanish River Pulp and Paper Mills, the retiring president, in his valedictory, after summing up the events of the year. "We are engaged in producing a staple commodity upon which



George M. McKee
Donnacona Paper Co., Donnacona, P. Q.
President 1922-23, Canadian Pulp and Paper Association

business and industry generally are largely dependent. The outlook is distinctly better than for the period from which we are now emerging. As an Association, as well as an industry, we can look forward with confidence if not with optimism."

Mr. Wilson also touched upon the Association's efforts to secure better trade relations with Australia. "The new Australian Tariff Law, which became effective last year, imposes an import duty amounting to £3 per ton upon newsprint and of 15% ad valorem on other grades of paper, but admits newsprint from the United Kingdom, duty free and other grades of paper on payment of a duty of 5% ad valorem," he said. "The effect of this discrimination against Canada, which is placed on the same footing as Germany and other countries outside the Empire, will, unless alleviated, be to exclude Canadian paper from the Australian market. Numerous representations on the subject have been made by our Executive to the Canadian Government and there is reason to believe that action looking to an amelioration of the situation may shortly be forthcoming."

The subject of improved technical education played a prominent part in the proceedings. The sum of $5,000 was voted to advance the publication of a series of self-instruction vocational text-books, which are being issued under the joint direction of Canadian and American paper manufacturers, making $15,000 in all so far advanced for this object by the Association. Committees were appointed to devise a better apprenticeship system for paper mills and to cooperate in the establishment of a correspondence course in pulp and paper technics. The Association reindorsed the movement for a National Institute of Technical Research and reappointed the Committee which is working to bring it about.

The Technical and Woodlands Sections both held unusually active and interesting sessions. The interest taken in these subsidiary organizations was illustrated by the fact that each of them took action petitioning the parent body to establish a separate manager for each Section who shall give his entire time to promoting its individual interests.

A pleasing feature of the annual meeting was the presentation to A. L. Dawe, the retiring secretary, of a handsome gold watch to commemorate his five years of active service with the Association.

The new executive is made up as follows:

President—George M. McKee, Donnacona Paper Co., Donnacona, Que.

Vice-President—H. F. E. Kent, Kinleith Paper Mills, Ltd., Toronto, Ont.

Secretary and Manager—Edward Beck, Montreal.

Executive Council—The above officers and P. B. Wilson, George Chahoon, Jr., F. J. Campbell, W. E. Walker, Jean Rolland, T. J. Stevenson, Ross McLaurin, F. W. Clarke, D. F. Robertson, George Pauline and George Carruthers.

Shoe Manufacturers' Association of Canada

By S. Roy Weaver

Manager Shoe Manufacturers' Association

THE Shoe Manufacturers' Association of Canada h ld its third annual meeting at the Windsor Hotel, Montreal, on February 1 and 2. Several hundred persons were in attendance and the programme was one of practical interest, featuring the following addresses:

"Some Iniquities of the Bankruptcy Law" L. P. Deslongchamps, vice-president and treasurer, The Slater Shoe Co. Limited.

"Credit Problems"—John Myles, general manager, The Columbus Rubber Company of Montreal, Limited.

"Packing and Shipping of Shoes"—G. C. Jackson, auditor of claims, Canadian Pacific Railway Company,

"The Industrial Outlook"—Arthur Surveyer, M. E. I. C., Montreal.

"Canadian-Made Shoes"—F. W. Knowlton general manager, United Shoe Machinery Company of Canada, Limited.

"Export Trade Opportunities for Canadian Shoe Manufacturers"—H. R. Poussette, Director, Commercial Intelligence Service, Department of Trade and Commerce, Ottawa.

"Practical Cost Accounting for Shoe Manufacturers"—W. F. Dickson, auditor, Endicott Johnson Corporation.

"The Canadian Sales Tax in its Application to Shoe Manufacturers"—R. N. McCormick, assistant manager, Tariff Department, Canadian Manufacturers' Association, Inc.

"The Sole Leather Situation"—Herbert T. Shaw, treasurer, Anglo Canadian Leather Co. Limited.

"Upper Leather Trade Conditions"—Lucien Borne, Quebec.

Some fifteen resolutions were adopted relative to the bankruptcy law, the credit problem, assignments and applications for compromise or general extension of time, the sales tax, marking of imported shoes, provision of laces with shoes, charges for cases, use of brands or trademarks which may be considered misleading as to country of manufacture, marking of Canadian-made shoes, charges on single pair or small lot orders, dumping of shoes into Canada, abuse of office by certain authorized trustees, and the tariff on boots and shoes.

At the annual banquet on February 2, Sir Lomer Gouin and Hon. James A. Robb were among the guests of the Association. Sir Lomer Gouin in an address of unusual interest reviewed the historical development of the shoe manufacturing industry in Canada and said in part:

"It would be superfluous to insist before you, gentlemen, upon the great importance of the boot and shoe industry to Canada, to the Province of Quebec, and more particularly to the cities of Quebec and Montreal. Your trade, interesting as the oldest of our industries is essentially Canadian. The capital invested in your business is Canadian. Your factories are controlled by Canadians. The raw material used in the manufacture of your goods is largely Canadian. A notable quantity of your machinery is of Canadian make. And all the profits from your business, when profits there be, returns to the Canadian population. That is why, gentlemen, you deserve encouragement. Your prosperity,—when you are prosperous,—should arouse the jealousy of no one. You are, however, not unaware of the fact that, at times at least, the impression had prevailed among some of our population that your industry yielded undue profits. But a glance over the list of the Canadian shoe manufacturers will show that very few large fortunes have been made in your industry, and if it were such a paying one, how could be explained the great number of failures registered? From 1865, over 165 of your most important factories had to close their doors. Yes, gentlemen, you are justly entitled to the unfailing support of your fellow citizens. You have a right to expect that,—price and value being the same,—the Canadian people will buy your product, in preference to goods of foreign manufacture.

"When we consider that from 1900 to 1914, our importation of foreign manufactured shoes has increased 700 per cent, that the ladies alone, who now have their share of public rights and obligations, are responsible for the importation from the United States last year, of over 500,000 pairs of shoes, for a value of $1,700,000, we can easily understand that our Canadian manufacturers should insist on being granted a reasonable measure of protection to assure the survival of an industry which is as old as the country itself. For it is on home trade alone, or nearly so, that your industry must live and thrive. You are practically excluded from the American trade; the prevailing rates of exchange have closed to you the markets of the United Kingdom, and the customs duties imposed by France, Belgium, Australia and South Africa, make the export trade impossible.

Keep Canadians in Canada

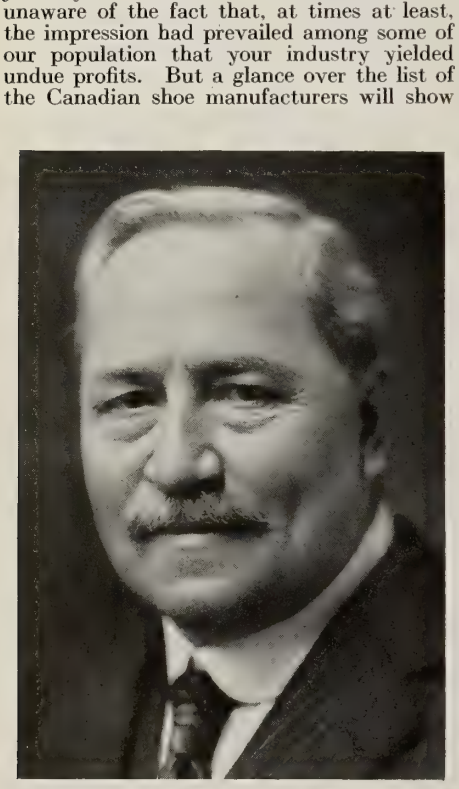
"More than every it is necessary that your industry should prosper and take its share of responsibility in the face of existing conditions. The country's salvation lies in the prosperity of our agricultural enterprises and of our national industries. We must manufacture in Canada, the raw material with which, we thank Providence, we are so richly endowed. We must keep our workmen at home and give them the means of earning their livelihood and that of their families. We should see to it that our sons and daughters, educated in our primary schools, our academies, our colleges, our technical and commercial schools, our high schools and our universities, find here a field of action, so that our country may derive the benefits of the science acquired by our engineers and of the experience of our captains of industry, and that they be not obliged to expatriate themselves to any foreign country in order to seek the opportunities for the development of their talents and to obtain the reward of their efforts."

Officers for the new association year were elected as follows:

Honorary President, F. S. Scott, Getty and Scott, Limited, Galt, Ont.; President, Joseph Daoust, Daoust, Lalonde & Cie, Limitee, Montreal; 1st Vice-President, J. D. Palmer, The Hartt Boot & Shoe Company, Limited, Fredericton, N. B.; 2nd Vice-President, J. E. Warrington, The John Ritchie Company, Limited, Quebec.

Executive Committee, L. P. Deslongchamps, The Slater Shoe Co. Limited, Montreal; D. F. Desmarais, La Duchesse Shoe Co. Reg'd, Montreal; A. Lecours, Canadian Footwear Company, Limited, Pointe aux Trembles, P. Q.; N. Macfarlane, The Macfarlane Shoe Limited, Montreal; A. Tetrault, Tetrault Shoe Mfg. Co. Limited, Montreal; T. H. Rieder, Ames Holden McCready, Limited, Montreal; F. H. Ahrens, Chas, A. Ahrens, Limited, Kitchener; G. W. McFarland, Williams Shoe Limited, Brampton; Jno. A. Walker, The Walker-Parker Co. Limited, Toronto; A. Brandon, The Brandon Shoe Company, Limited, Brantford; W. E. Woelfle, W. E. Woelfle Shoe Company, Limited, Kitchener; L. C. Van Geel, The Tillsonburg Shoe Company, Limited, Tillsonburg; A. Marois, Jr., A. E. Marois, Ltd., Quebec; J. E. Samson, J. E. Samson, Enc., Quebec; D. Marsh, The Wm. A. Marsh Company, Limited, Quebec; J. B. Goulet, O. Goulet & Sons, Limited, Quebec; C. S. Sutherland, Amherst Boot & Shoe Company, Limited, Amherst, N. B.; R. J. Leckie, J. Leckie Co., Limited, Vancouver, B. C.

The meeting confirmed the appointment of S. Roy Weaver as manager and L. Theoret as secretary of the Association.



Joseph Daoust
Daoust, Lalonde & Cide, Limited, Montreal
Re-elected President Shoe Manufacturers' Association of Canada

The Canadian National Clay Products Association

By Gordon C. Keith
Secretary-Treasurer of the Association

THE 20th, annual convention of the Canadian National Clay Products Association was held at the Carls-Rite Hotel, Toronto on February 7, 8 and 9. At the opening session the President, Ryland H. New, Hamilton, gave the president's annual address in which he pointed out that building conditions were improving and it was for the good of the industry that, with the increased demand, the clay products manufacturers continue to make the best possible article and satisfy, dealers, architects and the public.

The report of the secretary-treasurer, Gordon Keith, showed a balance in the bank. In reviewing the years work the secretary pointed out that the executive had made a protest against the sale of prison-made brick in competition with that made by free labor, that on several large jobs assurance was given that Canadian brick would be used and expressed the hope that something would be done during the coming year to have a ceramic course instituted in a school or college in Ontario, Saskatchewan having set an example.

The election of officers resulted as follows:
President—Ryland H. New, Hamilton (re-elected).
1. V. P.—T. H. Graham, Inglewood.
2. V. P.—Andrew Dods, Mimico.
3. V. P.—D. C. Merkley, Ottawa.
Secretary-Treasurer—Gordon Keith, Toronto (re-elected).
Councillors—H. H. Hallatt, Tilbury; Ray Price, Humber Bay; C. H. Wallace, Toronto; Robt. W. New, Hamilton; N. T.



Ryland H. New
President, Hamilton and Toronto Sewer Pipe Co., Limited, Hamilton
Re-elected President, Canadian National Clay Products Association

Gagnon, Montreal; W. J. Nicholson, Toronto; F. B. McFarren, Toronto and C. B. Lewis, Toronto.

The first paper was by William Burgess of the Don Valley Brick Works and dealt with he problems of conveying and pointed out the advantages of mechanical handling of material.

At noon on Tuesday a luncheon was held at which an address on compensation and safety costs with special reference to the clay products industry was given by R. B. Morley secretary of the Industrial Accident Prevention Association.

In the afternoon Prof. W. G. Worcester, Regina gave an outline of the work being done in ceramics by the Saskatchewan Government and University. Owing to the failure of several clay plants in Saskatchewan in past years and in spite of the fact that Saskatchewan is pre-eminent in clay resources the Government took action which resulted in the establishment of a ceramic course at the University. A survey of the ceramic resources has been made and the materials classified. Many changes in industrial methods have been made as a result of this. In order to impress the public with the advantages of brick, tile, etc., shows have been staged at the different exhibitions and information has been supplied at cost. This has been very successful. Among the clays tested up to the present time with only a small portion of the province covered, were fire clays, china, terra cotta, paving brick clays, and clays for paint and paper manufacture.

Two addresses were given on tunnel kilns by Geo. Booth, New Toronto, and W. S. Kupfer of Cleveland.

The afternoon session concluded with a paper on the economic handling of brick by L. Haigh Bucyrus.

On Tuesday evening the guests were treated to a theatre party by the local clay products manufacturers.

Second Day's Proceedings

On Wednesday the first paper was on the national importance of the clay products industry in which it was shown how the larger use of clay products would cut down the fire loss.

S. R. Walsh followed with an educative paper on the use of belts. He illustrated and explained how to get the longest wear and the greatest efficiency from them.

The morning session concluded with an address on the building outlook by J. B. Carswell, president of the Canadian Construction Industries. He was optimistic as to the outlook. The cost of materials had been reduced and had practically reached bottom, in fact some of them were below cost now, and, as soon as people realized this, there would be a great deal of construction.

The speaker at the Wednesday noon luncheon was Theodore Randall, secretary of the National Brick Manufacturers' Association, Indianapolis. Sandwiched in between an abundance of humor he described new methods of construction, outlined the need of cooperation in the industry and bade his hearers prepare for a good business year.

Wednesday afternoon the guests were taken to the Don Valley Brick Works, Booth Brick Company's plant and the Ontario Sewer Pipe factory.

The speakers at the annual banquet were S. R. Parsons, J. B. Carswell, Mayor Alfred Maguire, F. B. Freeborn, Dr. C. T. Currelly, T. A. Randall, Prof. W. G. Worcester and B. E. Bechtel. Andrew Dods was toastmaster.

S. R. Parsons spoke on cooperation between employers and employees. He urged the employers to take the first steps to bring about closer relationship with the men. He pictured the two sides as armies and then pictured them coming together and being welded together for a common purpose. With industrial disarmament this was possible. A number of attempts to bring this about had failed because the employer was not patient enough or lacked sincerity. He illustrated what had been accomplished where this had been sincerely tried out.

J. B. Carswell was of the opinion that the present depression was over. As soon as money is available without loss due to exchange, building would go ahead. The only trouble then will be the lack of mechanics.

These fine addresses were very cordially received.

M. B. Hastings opened the program on Thursday morning with an illustrated address on pyrometers. He explained the principles of operation and described several installations illustrating his talk with lantern slides.



W. A. Eden
Vice-President, Canadian Consolidated Rubber Co., Limited, Montreal
President, 1922-23, Rubber Association of Canada

W. A. Scherman gave an address on lubricating oils in clay plants.

G. F. Morris outlined the system of time recording and cost keeping for the clay products plants and pointed out the advantages of time clocks and recording instruments. These instruments were demonstrated.

J. E. Walsh, General Manager of the Canadian Manufacturers' Association was the speaker at the noon luncheon. Several questions of interest to the clay products industry were dealt with including workmens' compensation, freight rates, tariffs, etc. He described the operation of the trades' sections and pointed out the benefits of forming a clay products branch of the C. M. A. He urged manufacturers to take a greater interest in legislative matters.

At the closing session on Thursday afternoon, C. E. Hanson gave a paper on purchasing coal with special reference to storage and commercial analysis.

The question box was taken up by William Burgess.

The resolutions committee reported. It commended the executive for their action in connection with prison made brick and suggested that the association cooperate with other associations wherever possible.

The Rubber Association of Canada

By A. B. Hannay
Manager and Secretary of the Association

THE second annual meeting of the Rubber Association of Canada was held at the Windsor Hotel, Montreal, on the afternoon of February 14th, 1922, and was followed by a banquet in the evening. Both functions were presided over by C. H. Carlisle of the Goodyear Tire and Rubber Company of Canada, who has been president of the Association for the past two years.

At the banquet the principal speeches were made by Mr. Carlisle, Hon. A. B. Copp, Secretary of State for Canada, and the Rev. George Adam of Montreal. About one hundred and seventy-five guests sat down to the dinner, which was served in the Rose room of the Windsor Hotel.

At the annual meeting, the directors elected for 1922 were C. N. Candee, Gutta Percha & Rubber Limited, Toronto; John Westren, Dunlop Tire & Rubber Goods Company Ltd., Toronto; W. A. Eden, Canadian Consolidated Rubber Company Ltd., Montreal; R. F. Foote, Independent Rubber Company Ltd., Merritton; W. H. Miner, Miner Rubber Company Ltd., Granby, Que.; F. E. Partridge, The F. E. Partridge Rubber Co. Ltd., Guelph, Ontario; and A. R. Kaufman, Kaufman Rubber Company Ltd., Kitchener, Ontario. C. H. Carlisle, past president, becomes an ex-officio director.

Officers for 1922 chosen by the board were: President, W. A. Eden; Vice-President, C. N. Candee; Treasurer, John Westren; Assistant-Treasurer, C. H. Carlisle, Manager and Secretary, A. B. Hannay.

Manager's Report

The manager's report stated that the Canadian rubber companies had come through a rather difficult business year with considerable success, and the prospects were good for a steady improvement of the business of Canadian rubber manufacturers. His report also showed that the Association had been active throughout the year. It had collected statistics with a view of providing the Canadian Government with accurate information in the event of legislation affecting the rubber industry being proposed. It had also obtained a judgment from the Canadian Railway Commission reducing the classification on tires moving in carlots. It had given attention to the employment situation; had formulated proposals for a reduction of the volume of tire adjustments; and had collected useful statistics upon tire production and sales.

The meeting decided that the Association should undertake the compilation of statistics of rubber footwear and mechanical goods. Census figures were given showing the value of rubber goods manufactured in Canada in 1920 to have been $80,717,000; of which $40,716,000 were tires and tubes; footwear $24,332,000; belting $3,101,000 and hose $1,182,000. Tires and tubes were exported to the value of $11,000,000, and footwear $1,632,000.

A resolution was adopted changing the by-laws so as to permit the directors to transfer Association memberships where a firm member's interest is transferred by sale or otherwise.

The question of sales taxes was considered, and it was decided that the Canadian Government should be urged to exempt from such taxes sales by manufacturers to wholesalers and sales by wholesalers to other wholesalers, but that a 3% sales tax should be collected upon sales by manufacturers and wholesalers to retailers or consumers; and that the

manufacturer or wholesaler should not be allowed to absorb any part of such tax, but that it be invoiced as a separate charge to be added separately to the selling price.

A vote of thanks was passed to Mr. Carlisle, the retiring president, for the splendid work he had accomplished during the two years he had been at the head of the Association.

In his speech at the banquet, Hon. A. B. Copp expressed his gratitude to the rubber industry for having so ably assisted in the recent Canadian election, which resulted in return of the new ministry of which he was a member. He said that at least three-quarters of the voters went to the polls on pneumatic tires. Previously he had not been aware of the importance of the Canadian rubber industry, which he had just learned produced goods to twice the value of those produced by the agricultural implement manufacturers of Canada. He would have much pleasure in calling the attention of the Finance Minister to the importance of this industry, and had no doubt it would receive his attention when new taxation laws were being enacted.

Rev. George Adam expressed surprise and pleasure with the statement of the chairman that the prices of rubber goods in Canada were now 41% below pre-war figures. It struck him that there must be honesty in this business. He was glad to learn of this, because without honesty in business there could never be real prosperity.

The Furniture Manufacturers' Association

By Wm. Cawkell

Secretary-Treasurer of the Association

THE annual meeting of the Furniture Manufacturers' Association was held in their offices, 8 Colborne Street, Toronto, on February 1st and 2nd. There was a very large attendance of furniture men present. On the first day there was a large number of the factory superintendents present, and the president of the Association, J. H. Baetz in his opening address referred to the great improvements that had been made in the furniture industry during recent years, which had made it possible to hold this representative gathering of practical furniture men.

F. G. Lovett, Inspector with the Industrial Accidents Prevention Associations, spoke on accidents in the furniture factories, during 1921, their causes and prevention. He emphasized the fact that from 75% to 90% of the accidents that occur are caused through carelessness, not always on the part of the workman. He pointed out that the superintendents must realize that a great responsibility rested on them to see that proper guards were used, and also that the foremen instruct their workmen and demonstrate to them the dangers of the operation in which they are engaged. The foremen should see that safety devices are provided and that they are properly used. A safety device is only a guard when it is fulfilling its functions properly. He felt that what he was saying today before such a representative gathering would be instrumental in lessening the accidents during 1922. Co-operation all round was what was needed.

J. E. Ferguson, costing accountant of the Association,outlined the scheme that had been prepared by the special training course committee in regard to an apprenticeship training course, for cabinet workers. As a large number of the furniture factories are located in the smaller towns, it was necessary that the scheme should be one that would be applicable to all furniture factories alike, no matter where they were located. After the meeting had discussed this question, it was moved, seconded and carried that this meeting heartily approves of an apprenticeship course as drafted by this Association.

W. J. Feldkamp, of the Canada Glue Company, Limited, gave a treatise on glues, animal, vegetable and liquid, and he showed samples of the different basic articles from which glues were obtained. This treatise will be incorporated in the instruction sheets which are now being prepared by the Association, in connection with their training course for cabinet workers.

Directly after lunch Dr. F. W. Merchant, Director of Technical Education in Ontario, gave an address on technical training. He explained that in this country we had two distinct types of natural resources. On the one hand we had the vast material resources, for instance, farm lands, forests and minerals, the possibilities of which while immense, are mainly latent, but on the other hand we have the possibilities that are latent in the children born in the nation, and upon the development of whom is directly dependent, the development of the material resources of the country, because they are more or less valueless except in so far as they are developed.

So that the greatest of all our needs is that of education, and the education of the child fails if it stops with a simple academic training. It should not stop until the child finds itself in its life work. There should be no gap. The vocational school system is being organized in connection with our public school system, and the directors are prepared to co-operate with any municipality in establishing any school or any type of training, if there is really any demand; whether it is to be carried on by the Educational Department or by the Industry.

Thomas D. Perry, manager of the Grand Rapids Veneer Works, who operate the Grand Rapids Vapor Kiln Company, gave an address illustrated with some fine lantern slides which he brought with him from Grand Rapids. He showed several of the different styles of kilns in use on this continent, in addition to which he showed the mode of operating when dealing with the various kinds of woods under different conditions.

After the minutes of the general meeting had been read, the retiring president of the Association, J. H. Baetz, reviewed the work that had been done by the Association during 1921. He congratulated the members that they had weathered the storm of deflation, and this had been made easier and the industry had benefited generally by co-operative effort, and the broad-gauge methods adopted by the Association.



Wm. Krug

Krug Bros. Co., Limited, Chesley, Ont. Elected President, 1922-1923 of the Furniture Manufacturers' Association.

The Secretary-Treasurer, Wm. Cawkell, gave his report and financial statement, which showed that the Association was in a satisfactory financial position. The cost accountant, J. E. Ferguson, reviewed the work of his department during the past year. He pointed out that the work of extending the knowledge of factory costs had been continued during the year, and that this knowledge must always form the basis of proper control of a business's activities. In many cases more interest is now being taken in this work on account of the abnormal conditions prevailing. During the year the manufacturers were faced with a serious situation of falling prices, receding markets, and inflexible elements of costs. The wave of deflation which had set in during the latter part of 1920 continued undiminished throughout the greater part of the year, and it was only during the closing months that evidences of price stability were clearly seen. He pointed out that readjustment and revival offered opportunities to those who built wisely and from all high quarters comes the word that the year 1922 will see the beginning of that period.

To accomplish thorough readjustment does not mean selling goods below cost as in the past; the noise of the market-place must not overwhelm the warning signals from the factory. We must get back to a profit-making basis. We must face squarely all elements of cost and apply ourselves diligently to the reduction of costs. To repeat a part of our report last year, costs must be scrutinized at every step and every effort must be exerted to produce at the lowest possible cost. Materials, machines, men, methods and management will have to be employed to secure the greatest efficiency in production and selling.

Competition will be keen and if we can attain normal production good and well, but if volume is attained on profitless sales, we drain the industry of its very life's blood. It is gratifying to report that some members have applied themselves whole-heartedly to the problems of cost reduction, and it would be a lasting benefit if everyone would take steps to examine and control all factory operations. Cost knowledge is an absolute necessity to any industry. It is the keystone to the whole structure, and once this knowledge is acquired, the problems of sales and profits become less formidable. Our hope is that, during 1922, there will be an extensive and truthful examination of all costs and that there will be a real re-adjustment on a profit-making basis. If our costs take care of all elements of material, labor, and overhead, and a reasonable profit be added, our price position is unassailable.

The election of officers—President, Vice-President and Executive Committees resulted as follows:—President Mr. W. Krug; Vice-President Mr. J. A. Minchner.

Executive Committee and Advisory Board —W. J. Anderson, J. H. Baetz, J. E. Campbell, G. A. Gruetzner, P. R. Hilborn, J. S. Knechtel, J. R. Shaw, Jas. Malcolm, H. M. Snyder, E. O. Weber, D. M. Wright, D. E. MacIntyre, J. Malcolm, J. J. Spiesz, Geo. L. Lippert, W. G. Hay, F. W. Trebell, H. Ford and F. E. Mason.

Mahogany gavels were presented to the retiring President and the new President, on behalf of the staff of the Furniture Association and the Home Furnishings Bureau. Following the election of officers Mr. Kenneth Redman, of the Sturtevant Co. gave an address on the kiln-drying of lumber, illustrating it with a working model in full action.

Industrial Relations Bulletin

U. S. Coal and Railroad Situation

Workers at individual coal mines are reported to have made wage agreements involving decisive wage reductions, without awaiting the results of the negotiations by the United Mine Workers for a new general agreement. The date set for the hearing of the railroad wage cases by the Railroad Labor Board puts the hearings at about the same time as the coal miners' negotiations for a new wage scale, and a movement toward united action of coal and transport workers is rumored.

Decreased Production of Coal in U. S.

Anthracite Bureau of Information reports that shipments of anthracite during December, 1921, decreased approximately 1,800,000 tons as compared with December, 1920, and nearly 680,000 tons as compared with November, 1921, and was the smallest since September, 1920, when "vacation" strike was on. Total shipments for year 1921 amounted to 67,617,713 tons against 68,627,125 tons in 1920.

New York 48-hour Week Bill

Bill has been introduced in New York State Legislature limiting hours of employees to 48 per week, with not more than 10 in any single day, and states that "employees in factories, mills and manufacturing establishments, exclusive of firemen, watchmen, and employees having the custody of the premises, shall not be compelled or permitted to work more than eight hours in any one day for increased compensation, or otherwise, except under plan whereby excess of such eight hours shall be credited to such employees, and counted as part of a legal day's work for some other day in the same week. Such plan shall not allow more than 10 hours work in any one day."

Failure of North Dakota State Industrialism

Losses to North Dakota through state industrialism, is estimated by industrial commission at over $1,500,000 including $225,088 lost by Bank of North Dakota. The Commissions report says that Grand Forks flour mill has cost $1,000,000, and will require another $1,500,000 but be worth less than $2,000,000 when complete; loss at Drake mill exceeds $1.50 on every barrel of flour produced, and of 56 houses built by the state, only one has been sold at cost.

Wage Reductions in United States Cotton Factories

Cotton manufacturers in New Hampshire, Mass., and Maine, employing 50,000 operatives, have notified employees of wage cuts amounting in most cases to 20%, effective February 13th. New Hampshire plants have also posted notice of increase from 48 hours to 54 hours in weekly working schedule.

Chicago Building Trades Awards

Judge Landis, arbiter in dispute at Chicago between building trades unions and contractors, has announced scale of wages to become effective June 1st, and remain in effect one year, if accepted by the unions and contractors. News reports state that contractors had previously agreed to abide by award, and most of the union recently indicated that they would accept the awards, which are as follows: Plumbers, 95 cents; bricklayers, $1.10; boilermakers, $1; steamfitters 95 cents; electricans, $1.10; gasfitters, 95 cents; lathers, $1; common laborers, 97½ cents. Judge Landis is reported to have stated that the proposed rates are 25% higher than in 1918, except for unions where waste producing conditions prevail, where they are 18% higher.

United States Cost of Living

U. S. Dept. of Agriculture reports that average prices received by farmers for their products January 1, 1922, was about 24% lower than on January 1, 1921; about 59.4% lower than two years ago, and 33.4% lower than January 1st average for past 10 years.

Wage Reduction in Manchester England

In accordance with sliding scale agreement between employees and operatives, wages of 100,000 workers in dyeing, bleaching and finishing trades in Manchester, England, district will be reduced approximately 16%.

Cost of Living in Canada, December, 1921

	Dec. 1914	Dec. 1919	Dec. 1920	Nov. 1921	Dec. 1921
Food	7 96	14 73	14 84	11 08	11.00
Fuel	1 88	3 17	4 16	3 57	3 55
Rent	4 39	5 54	6 62	6 91	6 90
Total including laundry	14 26	23 49	25.87	21 60	21 49

Strikes in Canada, December, 1921

	Dec. 1921	Nov. 1921	Dec. 1920
Number of Strikes	17	18	14
Number of Employees	2,883	3,950	1,822
Working days lost	64,733	98,099	20,321

Unemployment in Canada

The volume of unemployment as reported by 5,242 employers with a total payroll of 605,249 persons continued to increase during the fortnight ending December 31st, during which 53,138 persons were released. The index number declined from 85.2 on the 17th December to 77.9 as compared with 87.7 for the same fortnight in 1920. The following table shows the situation by Provinces,—

	Relative Weight	Week of Dec. 17 1921	Week of Dec. 31 1921	Week of Dec. 31 1920
Maritime Provinces	9.0	83.1	78.1	95.9
Quebec and Ontario	69.0	83.6	76.8	85.2
Prairie Provinces	13.8	93.2	82.8	95.7
British Columbia	8.2	87.9	79.9	86.6
CANADA	100.	85.2	77.9	87.7

New York State Industrial Court

Bill introduced in New York State Legislature provides for an industrial relations term of Supreme Court as final arbiter in all labor disputes; court would be empowered to take over and operate essential industries during emergencies affecting the public welfare; Supreme Court at industrial relations term would have power to fix wages, hours of work, practices and conditions of work in the industry or plant affected by a dispute brought before the Court by the Governor. Strikes and picketing would be made unlawful. Industries handling or producing foods, clothing, building materials and similar necessities are specifically covered by the bill, and it is provided that other industries may avail themselves of its facilities for settling disputes. Collective bargaining is recognized and regulations established for choosing representatives of workers by secret ballot.

Institute Group Insurance

At the first of the year Rous & Mann, Limited, printers, Toronto, instituted the group insurance plan among their employees. Every member of the staff, who has been with them three months or longer, is covered with insurance in varying amounts, depending on length of service and value to the company. Rous & Mann, Limited, also intend to take up the question of mutual benefit and old age pensions.

Ker & Goodwin Machinery Co., Limited, Brantford, have recently shipped three carloads of their "Brantford" oil engines to France. Other shipments have been made recently to South America and the British West Indies.

A Spring "Round-Up"

WHILE no opportunity is ever lost by those interested in the Association to bring into membership any manufacturers who do not already belong, certain periodic efforts of concentration in this respect are unquestionably necessary.

The "Spring Round-Up" of 1922 has now been fully organized, and operations are well under way. Results have already commenced to come in.

Every new member adds strength to the Association, to the industrial position in Canada, and to the nation as a whole. Our members might keep this fact constantly in mind. For their own advantage as well as for the advantage of the Association, they might well make it a point to know their fellow associates, "mark down" new prospects, and never lose an opportunity on the street, in the office or in the club, of interesting them in the Association's manifold activities.

For the next month, members are urged to give themselves wholeheartedly to the business of securing new members. Local organizations have already been formed for this purpose in most of the cities and towns in Eastern Canada. Western Organizations are being formed. What can you do to help in this spring's "Round-Up"?

News Relating to Export Trade

Published by arrangement with Canadian National Export Club

Belgium Levies Import Tax of One Per Cent.

A new law has recently been put into effect by Belgium, by which a tax of one per cent. is levied on all goods imported into the country. This impost, which is called a "transmission tax," is levied by means of special stamps affixed to the entry documents, so that it is necessary to submit to the customs an invoice covering the goods. It is therefore important that such invoices accompany all shipments.

Anti-Dumping Legislation Passed in Australia

Now that the Anti-Dumping Bill has passed both the Australian House of Representatives and the Senate, it is to be presumed that the Proclamation prohibiting German goods from entering the Commonwealth will be revoked. The new Act should more effectively fulfil the object in view, for, as a matter of fact, the prohibition has proved altogether inadequate. Indirect importations from Germany have become quite common, so much so that a a number of Australian steel works found themselves unable to compete with these under-hand operations, and threatened to close down unless the Anti-Dumping Bill became law. These manufacturers are also demanding higher import duties on steel, but on this point allowance must be made for the protective character of their agitation, the importation of all foreign goods, whatever their source, being objected to.

Improved Buying in Ecuador is Reported

A subscriber at Guayaquil, Ecuador, describes the commercial situation in the Republic as showing distinct improvement in certain directions, and he instances the marked activity in building which is going on in all the principal towns, necessitating a good inquiry for a wide range of materials, from galvanized sheets and cement to locks and door-handles. Stocks of some varieties of cotton goods are also getting low, particularly prints and shirtings, and moderate fresh orders are being placed. The market is, of course, a relatively small one, but worth far more attention than is usually paid to it, a fact that Germany at any rate recognises, and as a result is introducing a number of lines at extremely low prices, the latter being an important feature with importers in Ecuador.

Conditions Prevailing in Colombia South America

The country is still suffering from trade depression, and the immediate prospects of an improvement are not great. The most hopeful sign is that each month the exports are considerably greater than the imports. Few of the merchants have been buying abroad, and for many months to come the imports will be small. Colombia should ship during the six months ended March next about 800,000 bags of coffee, which at about 20 pesos a bag should represent 16 million pesos. The imports for the same period will not be over 6 million pesos, and a considerable portion of these imports will be for equipment and stores for the oil and mining industries, which will be financed entirely abroad. The difference, therefore, between the value of Colombian exports and imports in the strictest sense will be probably greater than at first appears. If the present conditions continue, the country should be in a fairly good condition after March. As the gradual liquidation of merchants' indebtedness to the United States goes on, there will be a tendency for buyers to place their orders for merchandise in Europe, chiefly Great Britain. This is noticeable to-day, as the few orders which are being placed are going chiefly to British houses. There appears to be a disinclination on the part of most merchants to resume buying relations, maintained during the war, with United States firms; this is said to be due partly to American methods of business and partly to the quality of merchandise supplied. The goods which are particularly in demand from the United States are all kinds of textiles, hardware, tools, machinery, paints, oils, paper and crockery. There is a probable future market to be developed for agricultural machinery, tractors, motor vehicles, and machine tools, and dependent on the recovery in public finance, a considerable demand for railway material and rolling stock, railway and road bridges and road-making machinery.

The Truth About Rejected Goods in Argentina

A serious situation has been created at the port of Buenos Ayres owing to the rejection of merchandise sent in by United States exporters, but the position is much easier, and probably not more than 10 per cent of the goods accumulated a few months ago now remain unsold.

The *Epoca* points out that the initial cause of the congestion was the exchange fluctuations. Vessels from the United States arrived loaded with merchandise ordered by Argentine traders, who found themselves faced with a difficult situation, the goods having been acquired at an exchange rate below that then ruling. There was a common consent not to receive these goods, and an enormous stock accumulated in the Customs warehouses with apparently no prospect of being cleared.

Altogether the goods received in the port and refused by the consignees occupied a space of about 120,000 square metres, and no less than a million dollars (gold) has been paid, or is owing, in dock and storage charges.

Hardware formed the principal item, though there were also immense quantities of textiles, and the value of the merchandise is estimated at 60 million dollars (gold). The banks to whom these goods were consigned have endeavoured to effect a settlement, but traders have consistently rejected any offer less than the writing-off of 40 per cent in value. The manufacturers are apparently prepared to allow 20 per cent, but threaten to remove the goods if this is not accepted. Argentine traders are aware, however, that United States factories are heavily overstocked, and they are standing fast by their decision. It is believed that before long all the goods held will be offered for sale by public auction.

The United States Chamber of Commerce reports that the situation is not so acute as represented, and states that whilst a few months ago goods had accumulated to the value of between 50 and 70 million dollars (gold) a great deal has already been sold, and not more than from 5 to 7 million dollars' worth now remain. An independent estimate is that between 10 and 15 million dollars (gold) in goods are actually in sight.

The United States officers say that there is no evidence as to any concerted plan on the part of Argentine traders to reject goods, and that sales are steadily taking place. It is further reported that the recent appreciable rise in the price of textiles renders it improbable that there will be any ultimate serious loss on the goods held in the warehouses. It is believed that the worst stage of the crisis is now over.

Brazilian Centenary Exhibition Offers Opportunities

Will members who are interested in export or import trade with Brazil please advise the Commercial Intelligence Department of the Association.

Preparations for the great Brazilian Centenary Exhibition, to be opened at Rio de Janeiro on September 7th next, are now in full swing, and that it will provide an exceptionally valuable opportunity for the introduction of merchandise of every description into an increasingly receptive market is certain, especially as all countries are invited to participate in the event. The British Government has not yet, we understand, made a final decision in regard to the space required and the pavilions to be erected, but intending exhibitors will be interested to learn that the Brazilian Government has made the concession that all exhibits shall be imported free of duty.

In this coming event lies inspiration for commercial enterprise on a large scale. Brazil has seen the worst of the difficult crisis through which it has been passing. The heavy stocks built up during a period of over-importation are being steadily reduced; markets are again being found for the produce of the Republic; and big schemes are on foot for the further exploitation of natural resources, particularly in regard to mineral wealth, hitherto neglected. Enormous iron deposits have been discovered, and the development of this asset will put an entirely new complexion not only upon Brazil's economic importance, but upon its status as a commercial market, especially if it is found possible to smelt the ores on the spot. Some progress, indeed, is being made in this direction, one iron furnace already producing at the rate of about 15,000 tons of pig iron per annum, while several others are contemplated, including one with a proposed output of 150,000 tons. For these works electrical smelting plant is favoured, the fuel being charcoal obtained from eucalyptus plantations.

Further, big developments are in progress in meat-packing, and early in the present year it is proposed to set up an entirely new plant of modern design, while greater attention is being paid to the introduction of better breeds of cattle. Brazil, indeed, aspires to be one of the foremost cattle and meat-packing countries in the world. The Republic is extending its range of products for export in all directions. Vegetable oil, rice, mamioc meal, cocoa, beans, cotton, fibres, tobacco, wax, sugar and vegetable ivory have all forced themselves to front rank within the last few years, and in every one of them further developments are foreshadowed. Brazil is no longer merely a producer of coffee and rubber, and with every additional activity undertaken the commercial value of the market increases indefinitely, especially as the Government is affording valuable

encouragement to enterprises of this nature, and is promoting railway and other transport facilities, port improvements, and various public utility services with a view to the utmost possible development.

Preferential Tariff Treatment by Brazil

In his report on Brazilian trade the Commercial Secretary to the British Legation at Rio de Janeiro (Mr. E. Hambloch) refers to Brazil's extension of preferential tariff treatment to Belgium, and discusses the question of the granting of similar privileges to Great Britain. Mr. Hambloch says:

"A serious innovation has been made by the Brazilian Government in 1921, viz., the extension of preferential customs dues to Belgium. The Brazilian argument in support of their attitude towards the United States in this matter was that the latter were by far their best customers and took the bulk of their coffee exports, which were admitted into the United States free of duty. A preferential rate, therefore, in favour of that country was regarded as reciprocal treatment. In the case of Belgium, however, no such claim has been brought forward, and this concession to Belgium may be considered as a direct result of the visit of the King of the Belgians to this country in 1920, and appears to be explainable only on the grounds of sentiment.

"British commercial circles feel keen disappointment that Great Britain is exluded from the tariff advantages thus conceded to trade rivals. No other nation has up to the present taken any share comparable to that taken by the United Kingdom in the development of Brazil's natural resources, and British investments in Federal, state and municipal loans amount to nearly £250,000,000.

"British capital, moreover, is engaged all over Brazil in railway, port, and other public utility services, and the British claim to equality of treatment in the matter of preferential Customs dues is reasonable and just. It is to be hoped that our continued representations to the Brazilian Government will eventually meet with success, and that British trade in the future will enjoy that equality of treatment which its long and honourable record in this country deserves.

"British merchants dealing with this country have been as hard hit as any other by the prevailing commercial crisis in Brazil, but there is no doubt that their fair dealing and good judgment throughout have been appreciated and will bear fruit as conditions once more become normal. Brazil is a young country commercially and her potential resources are enormous. It is probable that the present crisis will pass sooner than many people expect, and that Brazil's purchasing capacity will continue to increase, especially if more attention be paid by all concerned to the standardizing of her products for exportation, while an enlightened policy on the part of the Federal and State Governments in regard to the development of Brazilian iron and steel resources will do much to establish Brazil's economic future on a sound basis."

Prospects for Canadian Trade with Cuba

IF the potential opportunities in Cuba and the West Indies are to be developed, and if the great market there is to be shared by Canadian manufacturers and exporters, direct steamship communication with Canada is a primary essential," declared Major Hugh A. Chisholm, former Canadian Government Trade Commissioner in Cuba, before leaving for Liverpool on the Canadian Pacific liner "Melita". Major Chisholm has now been appointed Trade Commissioner to India, and was due in Calcutta by the end of January to assume his new duties.

Before leaving Major Chisholm travelled all over Canada to give Canadian manufacturers and exporters important information on behalf of the Department of Trade and Commerce regarding Cuba and other Latin-American markets. There has been a gradual but definite change, he finds, in the attitude of Canadians towards the desirability of extending Canadian trade abroad, particularly so in relation to the Latin-American countries. Everywhere is shown eagerness to learn the peculiar and particular needs of prospective foreign customers, whereas a year ago, he said, indifference was the rule, people appearing to consider that the domestic market provided a sufficiently satisfactory outlook.

"Canadians should, and must develop a greater personal relationship with the merchants and importers of Cuba and her neighboring republics," explained Major Chisholm, "for in no other part of the world does the 'personal equation' count for so much in business."

Major Chisholm stated that during the fiscal year 1919-20 the total value of Cuba's foreign trade amounted to $1,290,000, United States Currency, which probably represents a larger foreign trade per capita of population than that of any other country in the world. Canada's per capita foreign trade has been reputed to be the largest in the world, but according to Major Chisholm, the Republic of Cuba, with about 30 per cent of the population of Canada, did a volume of foreign trade during the twelve months ending June, 1920 that was approximately 50 per cent of Canada's total for the calendar year 1920. Estimating Cuba's population at 2,700,000 her trade amounted to about $180 per capita, for her fiscal year ending June, 1920. This figure is over 50 per cent greater than Canada's per capita trade for 1920 and about four times that of the United States. Cuba's trade for the fiscal year 1919-1920 showed an increase of $504,000,000 or 64 per cent, over the previous year. About 75 per cent of the imports by Cuba came from the United States. Canada's trade is not shown in the report of the Cuban Secretary of the Treasury, but the Canadian Government statistics show that during the calendar year 1920 Cuba imported Canadian goods to the value of $7,560,000 as compared with $5,642,675 during the previous year. On the other hand, Canada imported Cuban products, chiefly sugar, to the value of $33,198,207, as compared with $12,565,712 during the preceeding year.

In the matter of merchandise a brief summary of the trade with Cuba for the fiscal years ending March 31, shows that imports into Canada from Cuba for 1914 were valued at $3,952,887; 1919, $3,040,953; 1920, $17,585,528; 1921, $30,743,239. Our exports to Cuba of merchandise for the same periods were as follows 1914, $1,815,414; 1919, $5,035,975; 1920, $6,329,783; 1921, $6,573,768 showing the striking preponderance of imports over exports in recent years. Not wholly of course, but much of this may be attributed to lack of proper steamship communication and the failure of Canadians to personally investigate conditions and opportunities in Cuba. The Canadian Bank of Commerce, which established a branch in Havana a little over a year ago, has been obliged to move into larger quarters on account of its over-growing and flourishing business. Other Canadian banks, the Royal Bank of Canada and the Bank of Nova Scotia, are also very well considered in Cuba and are planing extentions."

Chamber of Commerce in the West Indies are petitioning the Canadian Shipping authorities to give freiget reductions in the Canada-West Indies service.

Direct Relations with Native Importers in India

By a happy coincidence the visit of H. R. H. the Prince of Wales to India synchronises with a distinct improvement in commerical conditions in that country. The heavy stocks, which for a long period had remained practically immobile, are now being cleared. The helpful attitude of the banks, who had been saddled with an enormous volume of over-due bills, estimated at something like £30,000,000, but who have granted importers what practically amounts to a moratorium, has considerably eased the situation. Add to this the waning influence of "non-co-operation," and it is clear that healthier influences are prevailing all round. Of course, as Thomas M. Ainscough, O.B.E., H. M. Senior Trade Commissioner in India and Ceylon points out in his latest report, the losses to be liquidated are so heavy that it is only to be expected there will be a residuum of dealers utterly unable or unwilling to meet their commitments. But there is, on the whole, he adds, ground for hope that the situation will be cleared up without any undue shock to credit conditions.

There has, of course, been a tendency for some years past towards direct trade between English and other overseas suppliers on the one hand, and native Indian importers of standing on the other, particularly in regard to the bazaar trade. This seemed to be justified in view of the increasing general prosperity of the country and the spread of education and knowledge among the Indian mercantile community. Up to the crisis these new business relationships had proved generally satisfactory. But it undoubtedly came as a shock that the recent difficulties were "greatest in those centres, such as Bombay and Delhi, where," as Mr. Ainscough states, "the most liberal financial and trading facilities have been granted by British exporters to Indian importers and bazaar dealers. Liabilities have been repudiated and drafts dishonoured on a scale hitherto unknown." Further, he admits that "it is only natural that home firms who have hitherto been willing to accept indents direct from bazaar importers and to draw on them in the usual manner, should be doubtful whether the trade is worth carrying on if the Indian importer has no hesitation in refusing to meet his bill when the market goes against him and he is faced with a heavy loss."

There can be no question whatever as to the extent to which this new system of trading with the native importer has benefited British trade with India, Probably the enormous total of upwards of £100,000,000 representing Great Britain's export trade to India during the year just closed, would not have been possible solely through the older methods of transacting business with the market—that is, through the medium of the old-established merchant houses. But a big volume of supplies only becomes a proportionate disaster if the supplier does not get paid for them. Mr. Ainscough says he is convinced that if carefully conducted on sound lines the direct trade is a reasonably safe one, particularly in those cases where the home shipper has a resident representative in India to safeguard his interests. That may be true enough, but the repudiations which took place were on too extensive a scale to limit them, in the Trade Commissioner's phrase, to "the action of a certain number of unprincipled individuals." India's prospective trade is a valuable one, and, in spite of Mr. Ghandi and all in sympathy with him, it is bound to grow extensively. But it must grow on absolutely sound lines, and British firms will be well advised to exercise, as Mr. Ainscough himself urges, greater discriminati in the granting of credit.

Transportation Department Bulletin

Equalization of Eastern and Western Rates

The Transportation Committee, in a review of developments in connection with the general investigation re equalization of eastern and western freight rates, reports as follows with regard to the Maritime Provinces phase of the case,—

"The Board of Railway Commissioners held hearings at Halifax on January 17th and St. John on January 19th to hear evidence in connection with alleged discrimination in freight rates applying from points in the Maritime Provinces. Without going into the merits of the case it might be said that in view of the fact that the agitation which has been going on in the Maritime Provinces for removal of alleged discrimination in freight rates is of long standing, and has had a great deal of prominence when the various applications for blanket increases were considered by the Board that the witnesses appearing at the Halifax hearing were comparatively few and the general effect was more or less disappointing. This was evidently due to lack of preparation on the part of the various shippers interested, and does not in any way detract from the evidence submitted by Mr. Finn, who appeared for the government of Nova Scotia and the Halifax Board of Trade. Reports received from Mr. Ruickbie indicate that very few of our members had their cases advanced enough to be in a position to proceed at the hearing in Halifax. In company with Mr. Thompson, our Secretary at Amherst, Mr. Ruickbie interviewed various members representative of the chief lines of industry in the Maritime Provinces and co-operated to the fullest extent in preparing exhibits and advising them in regard to the essential facts which should be brought out in their evidence.

"A very representative attendance was secured for the St. John hearing and it is felt that a very good case was made out. We think it may be stated with justice that any adjustment granted will in a large measure be due to the joint efforts of our members together with the assistance rendered by Mr. Ruickbie. Mr. I. C. Rand, who appeared for the New Brunswick government and Maritime Boards of Trade also made a very favorable impression at the St. John hearing."

The Committee also reported as follows with regard to the application filed by the Sault Ste. Marie Board of Trade,—

"An application has been filed with the Board of Railway Commissioners by the Soo Board of Trade seeking the extension of schedule "A" basis of class rates. This basis of rates was prescribed by the Board in the so-called International Rates Case in 1907 to apply from what are known as town tariff points in that territory, roughly defined as lying east of the St. Clair and Detroit Rivers, Georgian Bay, etc., and extending north on the Grand Trunk Line to North Bay, and east and south thereof to the Ottawa River. At that time the C. P. R. line did not extend north of Parry Sound and that point was therefore named as the northern limited on the C. P. R. This is not a scientific scale but was accepted at that time as a compromise to remove as far as practical the discrimination which existed in respect to the rates applying from United States border points such as Buffalo and Detroit to Montreal, Toronto and other points in Ontario.

"A communication received from the Soo Board of Trade making inquiry as to the views of the Association in this connection was replied to by the Assistant Manager in which he briefly outlined the situation and expressed the opinion that, as the discrimination alleged in the application to the Board would no doubt be considered by that body in connection with the general investigation regarding equalization of eastern and western freight rates, this Association, being of a national character, could not very well take any definite stand in the matter. On consideration, however, the Transportation Committee were of the view that as the application of the Soo Board of Trade dealt with alleged discrimination in rates between a certain defined territory, or in the Province of Ontario, it was therefore hardly on the same footing with the general investigation at present being conducted by the Board which contemplated a general readjustment of rates between various territories in the Dominion and in the circumstances it is our opinion that it should be dealt with separately by the Board. In view of the fact, however, that we have not been approached by any of our members in that territory for any assistance in that connection, the Assistant Manager was directed to communicate further with the Soo Board of Trade to this effect."



Who Owns the Cow Anyway ?

—Cartoon in the Grain Growers' Guide

Judgment in Bell Telephone Increase Case

The Board of Railway Commissioners issued a majority judgment on February 7th, the Chief Commissioner and Assistant Chief Commissioner dissenting, denying the application of the Bell Telephone Company for approval of proposed new tariff of rates covering exchange service and providing for increases varying in amount from 2% to 95%.

In arriving at this conclusion, the majority judgment briefly summarized the former awards made by the Board in connection with previous applications of the Telephone Company, on which occasions the Board expressed the opinion that the Company's tariffs were not in touch with existing conditions and contained many inequalities and discriminations and further exhibited a lack of any scientific basis in grouping of towns in relation to the number of stations and population, value of service, etc., and showed on their face that certain districts and cities were paying more than others under substantially similar conditions. It was pointed out that as the applications of the Company on former occasions were launched to meet certain emergency conditions then existing, the Board treated them on that basis and granted percentage increases for temporary relief only. In view of the fact that the latest application is not, in their opinion, intended to meet an emergency and in fact, that no such condition exists, they have dealt with the proposed tariff which they have been asked to approve on its merits and find that the Company has not produced any satisfactory evidence to show that the proposed tariff would be suitable, just or reasonable for the telephone services mentioned and that the same inequalities and discriminations referred to by the Board in their former judgments appear in this proposed tariff and therefore should be rejected.

The majority judgment further states that the Board do not consider any percentage increase upon the present exchange rates desirable in order to enable the Company to obtain the additional revenue which it is alleged is necessary to meet its requirements. It is pointed out that the evidence submitted in support of their contention that the increase granted by the Board in April 1921 fell short by $1,357,500 of meeting their requirements was not substantiated by the evidence. The statements of operating expenses of the Company for the eight months May to December 1921 indicated a marked decline in the last five months as a result of economies effected by reduction in staff made in August last or subsequent to the present application. The view was expressed that they considered it only fair to assume that the Company could have, at its option, effected these economies many months preceeding that date, and if so introduced, the requirements of the Company would have been substantially met. On the figures before them, the Board estimated that the maximum amount required to implement the requisite revenue to meet all the Company's requirements was

roughly $600,000 and stated that any tariff subsequently submitted for approval should be constructed upon the basis of these requirements, subject to further reductions therein as the economies produced better results so as the public might get the full benefit thereof.

Briefly, the majority found that no justification had been offered to warrant them in increasing rates to present subscribers to enable the Company to provide the money necessary for expansion of business (and which principle has never been accepted); that the Company's credit was, and is, ample for the purposes of financing temporary financial requirements to cover such extensions and new business, that there is no evidence before it to justify the tariff of rates offered for approval which is admittedly out of line, discriminatory and objectionable for the reasons advanced above, and finally that as no emergency condition exists, and no grounds have been shown which would justify any temporary or emergency increase in rates, that the application must be refused.

New International Express Tariffs

At the February meeting of the Transportation Committee, the Assistant Manager of the Transportation Department reported that he had discussed the situation arising from the operation of new international express tariffs with Mr. Muir, vice-president of the Canadian National Express Company recently. Mr. Muir explained the position of the express companies very clearly and emphasized the necessity of the adjustment which had been made in these rates so as to re-establish the relationship which formerly existed. It was shown that while these rates had been adjusted so as to reflect the increases authorized by the Interstate Commerce Commission in the local rates between United States territory from time to time, no adjustment had been made in these international rates allowing for the two advances which had been made in local Canadian rates during the same interval and owing to this fact it was found that certain anomalies existed in the tariffs, particularly in rates from points in Canada to points in the United States just across the border which in some instances were lower than the local rates to Canadian points situated on the border.

Mr. Muir expressed regret that these changes had been published without any announcement having been made to the various shippers organizations as to just what was proposed and advised that this oversight had been accidental, due to the fact that the tariffs had been published by the American Railway Express Company in New York, and one which they sincerely regretted. He promised that he would see that the necessary arrangements were made so that we would in future have previous notice of any changes that might be contemplated so that we would be afforded an opportunity of placing our members in possession of the facts and avoid any misunderstanding.

The complaint of the Booth Fisheries, Chicago, resulting in the suspension of these new tariffs by the Interstate Commerce Commission, but which did not affect their application where the express charges were paid in Canada in view of the fact that the Canadian Commission refused to take similar action, was set down for hearing on January 23rd. The complainants were not represented at the hearing, however, as they had previously arranged to withdraw their complaint following a conference with the express companies at which it is understood the latter pointed out that the special commodity rates in which they were interested were not affected by the readjustment which had been made and had promised to provide for commodity rates on the Booth Fisheries' products from the few points where class rates had formerly applied.

At the hearing it developed that the Commission had been furnished with a report by the Interstate Commerce Traffic Division alleging that these new international tariffs allowed the American Railway Express Company more for their portion of the haul within the United States than they received for the same haul under their local tariffs. The respondents denied this, however, and submitted evidence in rebuttal indicating in fact that the proportion accruing to them under the new international tariffs would be less than what they would receive under their local tariff. The remarks of the Examiner presiding at the hearing implied that he was impressed with the evidence submitted by the express companies in justification of the new tariffs and their request that the Commission vacate the existing suspension order and the express companies were allowed thirty days in which to file a written brief after which the Commission would render their decision.

As the action of the Transportation Committee in this connection was more or less prompted in the first place by a desire to secure assurance from the express companies of closer co-operation in connection with any future changes contemplated rather than a challenge as to the reasonableness of the rates in question, in view of the satisfactory understanding arrived at by the express companies whereby they will acquaint us with any changes proposed in the future before same are incorporated in their tariffs, it was decided that final action in respect to these new tariffs should be allowed to remain over until the next meeting pending disposition of the matter by the Interstate Commerce Commission, which is expected shortly.

Idle Car Situation

The idle car situation for two-week period ending February 1st shows the following:

Total cars on Canadian Lines	203,671
Allowance for Bad Order Cars (A. R. A. Basis)	14,257
Actual Bad Order Cars	19,018
Excess Bad Order Cars over A. R. A. allowance	4,791
Surplus cars in good order	45,700
Total idle cars	50,191

The idle car situation for two-week period ending February 15th shows the following:

Total cars on Canadian Lines	202,311
Allowance for Bad Order Cars (A. R. A.) Basis	14,162
Actual Bad Order Cars	20,011
Express Bad Order Cars over (A. R. A. Basis)	5,849
Surplus cars in good order	40,330
Total Idle Cars	46,179

News from the Tariff Department

Board of Customs Decisions

Declared that one ton metal cylinders containing chlorine and imported on special cars are dutiable on first importation but thereafter they may be entered free when complying with the regulations published in Departmental Memo No. 1398-B.

Declared that electrolytic cell liquor, known as caustic soda in solution, is dutiable under tariff item 210 (a) on the total weight at time of importation at the rate of 30c per 100 lbs. or 25% ad valorem under the general tariff according to the size of package in which imported.

"Pako" Professional Printer, per illustration, designed for use in photographic studios for the purpose of printing photographs by means of artificial light, declared to be dutiable under tariff item 657 at the rate of 25% under the general tariff.

Four buckle, rubber sole and heel, cloth top overshoes, or goloshes, or similar light cloth top button overshoes, per samples, declared to be dutiable under tariff item 617 at the rate of 25% under the General Tariff.

Townsend 5 unit Triplex Mower (Lawn Mower), per illustration, declared to be dutiable under tariff item 150 at the rate of 32½% under the general tariff.

Department Rulings

Aluminum pocket seals, so called, trade marked, "The Aluminum" from the Superior Type Company, Chicago, found to be nickel-plated seals and dutiable under tariff item 362 at the rate of 35% under the general tariff.

Monthly publication entitled "Pit & Quarry" published by The Complete Service Publication Company, Chicago, ruled to be dutiable under tariff item 178 at the rate of 15c per lb. under the general tariff.

Brass Condenser Tubes, tinned, are not made in Canada and these articles may, therefore, be admitted duty free under tariff item 470 for the construction or equipment of ships or vessels, until otherwise determined. Appraisers' Bulletin No. 2223 should be amended accordingly.

Australian and New Zealand Tariffs

Copies of the Australian and New Zealand tariffs are on file in the Tariff Department, and particulars as to Customs duties and other information respecting shipments to these countries may be obtained on application to the Tariff Department.

Certificates of Origin Required by Jamaica

At the present time Jamaica gives a preference to the United Kingdom and other parts of the British Empire, in respect of certain cotton piece goods. In order to obtain the benefit of the preferential rate cotton piece goods of Canadian manufacture require to be accompanied by certificate of origin and value which has been adopted for Customs purposes in Jamaica. Information as to the form of certificate may be obtained on application to the Tariff Department of the Association. If and when Jamaica introduces a tariff to give effect to the West Indies Trade Agreement, the same form of certificate of origin and value will be required for all shipments of goods on which a preference may be given.

ANNOUNCEMENT

THE International Business Machines Company Limited, takes pleasure in introducing to the Canadian public an important new invention, the Electrical Recording Door Lock.

The Recording Door Lock is a superb piece of mechanical equipment for which, we are in a position to say positively, there will be an instant and widespread demand.

When you employ this equipment the door of your office, or your store, or your factory cannot be unlocked without electrically registering:

(1) Whether the door was opened from the outside or from the inside;

(2) on what day; and (3) by which employee.

The International Recording Door Lock

is simply controlled by each employee's specially designed key though in appearance it resembles an ordinary lock.

The manifold advantages of this equipment will be immediately obvious. It protects your goods; it protects your store; it protects your office and all the valuables that may be contained therein. It places the responsibility directly upon the person who entered, showing in print the exact time he entered, how long he remained and the exact time he left.

This wonderful lock is wired to an autographic register in which is a roll of paper. On this roll the printed record is made automatically when the key in the door is operated. Eight keys may be had for any one door. Eight doors may be related to the same autographic recorder.

At the same time, the autographic recorder, a perfect timepiece, may be used for the other employees who do not have keys as a time recorder or place to register their attendance.

To see this equipment is to marvel at its simplicity, yet the wonderful precision with which it functions.

The International Business Machines Co. Limited, has expended a fortune in preparation for large scale production of this equipment. We know the demand will be tremendous. The price is $275. for the autographic recording instrument, and for each lock requested $55.

Never has an invention comparing with this been sold at so reasonable a price.

Fire Chiefs and Police Chiefs have pronounced that it fills a long felt want in giving a necessary record for any store, office, or store room, where valuables or merchandise are kept.

You can have this equipment demonstrated to you
in a few minutes at any of our Sales Offices.

The International Proves Its Claim to Leadership

Why the International Recording Lock Equipment is one of the best investments a merchant can make



1 Because it gives him a complete, printed record of the locking and unlocking of his entrance and exit doors.

2 Because this record tells him five things:
1. Which door.
2. Whether it was locked or unlocked.
3. Whether locked or unlocked from the outside or inside.
4. The identity of the person.
5. The day, the hour and the minute.

3 Because the record, instead of being made in the lock itself, is transmitted to and printed in a separate device and, therefore cannot be affected by the jarring of the door.

4 Because the total cost of an International equipment is less in the long run than the cost of a rented lock.

5 Because, for what the merchant would ordinarily pay in rental charges in the long run he can own his own International equipment.

6 Because in addition to getting the most complete, most reliable recording lock equipment made he receives the benefit of an added service. A record of the arrivals and departures of a designated number of employees.

7 Because when he buys an International Recording Lock equipment he invests in time recording devices backed by the oldest and largest manufacturers of time recording devices in the world and adds his name to a Satisfied Users list containing the names of most of Canada's prominent concerns.

INTERNATIONAL BUSINESS MACHINES CO., LIMITED

FRANK E. MUTTON, Vice-President and General Manager

Head Office and Factory, ROYCE AND CAMPBELL AVENUES, TORONTO

For your convenience we have Service and Sales Offices in VANCOUVER, WINNIPEG, WALKERVILLE, LONDON, HAMILTON, TORONTO, OTTAWA, MONTREAL, QUEBEC, HALIFAX, ST. JOHN, Nfld.

Also manufacturers of International Dayton Scales and International Electric Tabulators and Sorters.

Trades and Labor Congress Programme

Statement presented to the Federal Government on Friday, February 24th

1. Legislation arising out of the Three Annual Meetings of the International Labor Organization.

With the exception of decisions arrived at during the conference October-November, 1921, Geneva, the conventions and recommendations of the International Labor Organization were presented to Parliament during the latter days of the last Session whilst the conventions and recommendations of the last Conference (Geneva) are no doubt now in the possession of the Labor Department, an official of which Department was present in Geneva representing the Dominion Government.

Many of the matters referred to have been considered by the late Government as coming within the jurisdiction of Provincial Legislatures and we therefore particularly request, at this time:—

(a) That your Government take steps to have the conventions of the International Labor Organization accepted as Treaty obligations and therefore brought within the jurisdiction of the Federal Government.

(Precedent for this may be found in the action of the Federal Government relating to the Berne Convention prohibiting the use of white phosphorus in the manufacture of matches, etc.)

(b) That action be taken to give legislative effect to all, or such items, as may be decided to be within the jurisdiction of the Dominion Government.

(c) Should the decisions of the late Government be upheld that many of these conventions and recommendations are within the jurisdiction of the Provincial Legislatures, that your Government will take immediate action, on the official request of the Ontario Government, to call a conference of official representatives of the Provincial Governments in order to bring about immediate and unified action by the various Provincial Legislatures and thus fulfill the moral obligations resting upon the Canadian Government under the terms of the Versailles Treaty of Peace to which Canada is a signatory nation.

2. Election and Franchise Act Amendments.

(a) To provide for proportional representation in group constituencies and transferable vote in single constituencies.

(b) To make election day a public holiday throughout the Dominion.

(c) To abolish forfeiture of election deposits.

(d) To restore the right of railroad workers to offer themselves for political office without forfeiting their positions or seniority on the National railroads and correct the injustice created by what has been known as "the Hanna Order."

(e) Repeal of Clause 10, Franchise Act, 1920, which prohibits trade unions and similar organizations contributing to election campaign funds.

3. Immigration.

(a) Repeal of Bill 03 (1919), so as to restore the right of British citiizens now liable to arbitrary deportation.

(b) Exclusion of Asiatics.

(c) Endorsation of the creation of a Central Empire Emigration Board, on which Labor should be represented, with power to supervise advertisements and other immigration activities in Great Britain.

(d) Prevention of labor recruiting outside Canada by private persons or companies.

(e) The prohibition of all immigration from European countries for a period of not less than two years with the exception only of exempted classes.

We respectfully draw your attention to the detailed report on immigration adopted at the Winnipeg Convention of the Trades and Labor Congress of Canada (1921) and which is printed in the proceedings on pages 201-205-206 and 217.

4. Unemployment Insurance.

We request legislation to provide for Dominion-wide unemployment insurance which will embody the following principles:—

(a) Creation of a Federal Fund, from which payments may be made to unemployed, and under-employed persons.

(b) This fund to be raised by assessment on the payrolls of undertakings whose workers are covered by such insurance and added to by Dominion and if possible Provincial public funds.

(c) Payments to be made to workers during actual unemployment or when employed for fixed periods for less than seventy-five per cent of their regular working hours.

(d) No employer to be allowed to discharge numbers of workers without due notice to the Employment Service of Canada so as to give them an opportunity to provide for their redistribution.

(e) The Government to have power to investigate as to the real need of discharge of workers, and consequent limitation of production.

(f) No employers to be allowed to discharge workers for lack of work, until the hours of such industry have been reduced to at least half of the normal working hours.

(g) Workers in this way under-employed to have their wages supplemented from the Federal Fund up to not less than seventy-five per cent of their normal earnings.

(h) This Act to apply to workers under public bodies as well as to private employers.

(i) Use of the Advisory Councils of the Employment Service should be made for the carrying out of the Act, and power given them to deal with matters relating to the co-ordinating of public works, and perhaps their partial financing from the fund, in order to avoid unemployment.

These suggestions are by no means complete but would provide a starting point for this much needed legislation.

5. Criminal Code Amendment.

(a) To legalize peaceful picketing.

(NOTE.—Legal decisions rendered during the past three years have apparently taken away the right of trade unionists to picket which is granted in British law and used to be part of the Criminal Code of Canada.)

(b) Revision of the Criminal Code to eliminate section referring to sedition, seditious conspiracy, etc., and also the words "force" and "terrorism" passed during the Panicky Session of Parliament, 1919.

(c) Amendments to define sympathetic strikes by inserting in Section 2 (38) "workman means all persons employed in trade or industry whether or not in the employment of the employer directly involved in the trade agreement."

(NOTE:—This is provided in the British Trades 3, Disputes Act, 1906.)

6. Collective Bargaining and Democratic Development within Public Services.

(a) By the consolidation of all nationally owned and controlled railroads and the placing of a worker's representative on the Board of Management.

(b) The establishment of closer co-operation in the Civil Service by the establishment of national and departmental councils along similar lines as provided in the Whitley (British) report and as at present obtaining in the British Civil Service.

7. Old Age Pensions.

Legislation providing for payment of pensions to old and needy citizens of Canada

8. Tariff Board.

The creation of an Independent Tariff Commission on which Labor shall have representation so as to remove to the fullest degree the question of Tariff from the political arena.

9. Fair Wage Regulations.

An Act to clearly define the fair wage resolutions of 1900 and 1907 and to extend the same to cover the manufacture of supplies and equipment for the Government or any of its commissions and services. This is requested in view of the constantly recurring evasions of the present fair wage provisions, the lack of definition as to what sections of Government contracts they apply to, and the apparent lack of authority of the Labor Department in these matters because of absence of definite legislation.

10. Industrial Research Council.

We urge that your Government should recognize the importance of the work being undertaken by the Honorary Advisory Council for Scientific and Industrial Research and that measures be taken to provide proper facilities for the continuation and development of this Council's activity.

11. Prison Reform.

We request legislation to give effect to the reforms incorporated in the report of the Special Advisory Committee on Prison Reform (1921).

12. Abolition of the Senate as non-elective body.

13. Registration of Union Labels.

Protection against infringement and misuse of Union Labels, by allowing for their registration in Canada.

14. Review and Amendment of the Industrial Disputes Act.

15. Additional Subjects mostly of a departmental nature are:—

(a) That an inquiry be instituted into the cost of construction, etc., of ships built during the Toronto Ship Yard dispute of last year.

(b) That military bands be prohibited from unduly competing with civilian bands.

(c) That all public utilities, railroads, shipping, etc., now owned by the Dominion Government be retained and that a policy of further public ownership and control of national resources and public utilities be followed.

(d) That all possible restriction of naval and military expenses be undertaken and the principle of disarmament endorsed.

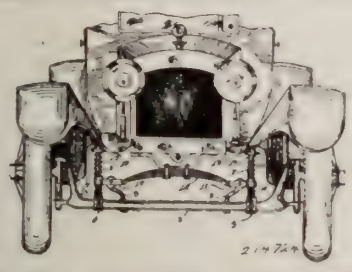
(e) That measures be inaugurated to aid the development of the Co-Operative Movement in Canada.

(f) That full inquiry be made into the capitalization of industry and measures taken to protect the public against the evils of over-capitalization.

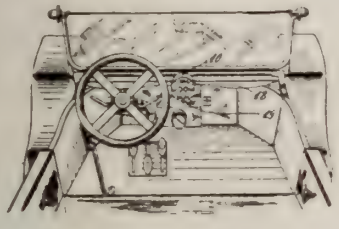
(g) That immediate steps be taken to cope with the present acute unemployment

PATENTS FOR SALE

WATER SOFTENING COMPOSITION: Mrs. Mary C. Campbell, of 26 Bay St., New Brighton, Staten Island, New York, has a composition for softening water, consisting of carbonate of soda, lime, silicate of soda, caustic soda, bichromate of soda, and tri phosphate of soda combined in solid form and would be pleased to receive inquiries regarding sale of this Canadian patent.



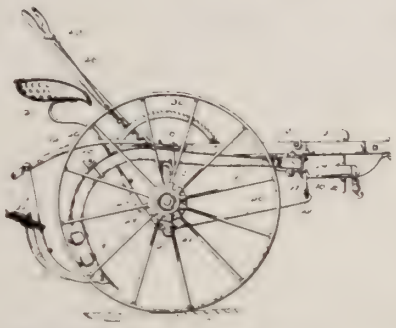
SHOCK ABSORBER: This invention relates to improvements in shock absorbers, adapted for connection to light constructed automobiles, and functioned to equalize the stress encountered by the automobile while in motion on the roadway. For full particulars regarding sale of Canadian patent, write Mr. S. Christopherson, P. O. Box 126, Watson, Sask., Canada.



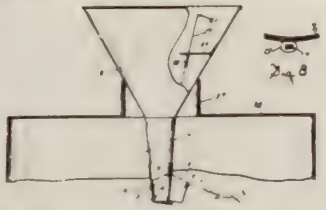
VEHICLE SIGNAL. This invention relates to a signalling device and includes the combination with a hollow cylindrical casing adapted to be secured at the rear of a vehicle, a cover plate therefor, a shaft mounted axially in said casing, a transparent pate fixed in said casing, said plate having an undercut annular recess formed concentrically in its outer face contiguous to its periphery, a normally convex transparent plate, the edges of said convex plate engaging in the mentioned recess in said fixed transparent plate, means for securing said convex plate in position, an index hand carried by said shaft and means for manually rotating said shaft and index. Write Mr. Frank Baker, 309 Tra Ave., Akron, Ohio for information regarding the sale of his United States patent.



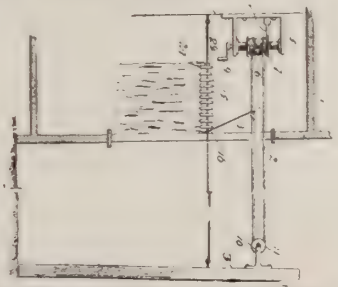
CONSUMPTION CURE: Mr. J. Scutzlas has obtained a United States Trade Mark to be used in connection with a consumption cure and pharmaceutical preparation and is desirous of selling the formula and Trade Mark. Any firms or parties interested in this should write Mr. J. Scutzlas, 337 West Pine St., Mahanoy City, Pa.



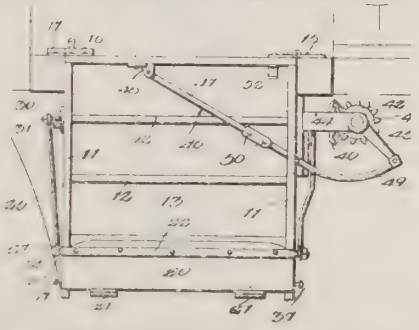
CULTIVATOR: This invention relates to agricultural implements and has for its object the provision of means whereby the driver seated upon a wheeled implement may raise or lower the cultivator shovels or other soil-engaging members without being required to raise his own weight and also to provide a seat support which will relieve the draft animals of the weight of the driver. For full particulars, write Mr. G. T. Goodwin, Crawford, Colo., who has a Canadian patent pending similar to his United States patent 1,382,122, granted June 21, 1921.



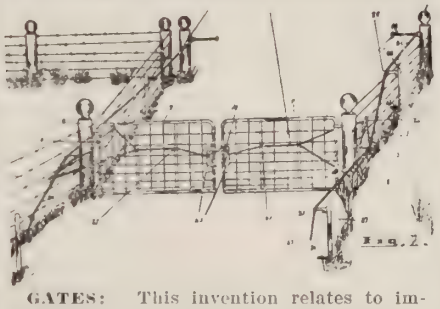
FUNNELS: This invention relates to improvements in funnels, comprising in combination with a liquid filling tube having an outlet opening and a receptacle receiving the liquid from the tube, of a hollow valve having a flooding opening in the upper end thereof and designed to close the outlet opening of the tube, means normally locking the valve open and permitting of a vertical floating movement of the valve in the open position, means limiting the vertical travel of the valve and effecting the filling of said valve with liquid in the rising of the liquid within the receptacle and the consequent sinking of the valve in the liquid, and means actuated by the sinking valve designed to release the locking means and effect the closing of the valve. Write Mr. George Verhaag, Box 4311, Yorkton, Saskatchewan, for full particulars in regard to the sale of his Canadian patent.



CLOTHES-DRYING APPARATUS: This invention relates to clothes-drying apparatus and consists in the combination of an endless driving line, a track line contiguous to said driving line, load-supporting means adapted to travel upon said track line, a connecting link coiled at one end around the driving line and having its other end surrounding said track line, and connecting means for said link and load supporting means whereby, when the driving line is driven, the connecting link will cause the load-supporting means to travel upon the track line. The inventor, Mr. Rade N. Perovich, Washoe, Montana, would appreciate receiving inquiries regarding his Canadian patent pending similar to his United States patent 1,386,199.



EXTENSION-STEP: This invention relates to extension steps and consists in the combination with a railway step having stringers and a hinged door of an extension step hinged to the step, links connected to the step, means connecting the said links to said door for swinging, said extension step to its operative position when the door is elevated, and stop elements disposed in the path of travel of said links to limit the movement of the same. Mr. Albert E. Seibert, Frankfort, Mich., would appreciate receiving inquiries regarding his Canadian patent pending similar to his United States patent 1,394,365, granted October 18, 1921.



GATES: This invention relates to improvements in gates and comprises in combination gate members, vertical posts, means for hingedly mounting the said gates on the said vertical posts, means connecting the said gates for simultaneous actuation, the said means comprising vertical shafts substantially mounted in end members of the said gates, drums mounted on the lower ends of the said vertical shafts, a cable disposed around and connecting the said drums, means for tightening the said cables, means housing in the said actuating members, means automatically locking the said gates when in closing position, said means comprising trip and locking members pivotally mounted in intermediate end members of the said gates, a guide member, a transverse pin disposed intermediate in the said guide member for engagement with the said locking member, the said trip member functioned to disengage the said locking members, retractile springs connected to the said locking and trip members for resilliently holding the same in normal position. For details regarding the sale of Canadian patent, write Mr. R. Edward Findlay, R.F.D., No. 1, Breckenridge, Que.

Harold C. Shipman & Co., Patent Attorneys, Ottawa, Canada

situation by the undertaking of necessary public works, etc., and in this respect we draw to your attention the report adopted at our Winnipeg (1921) Convention, printed on page 200 of the proceedings.

(h) Measures be taken to more closely coordinate the work of the Labor Department and Immigration Department and in case the Immigration Department ceases to be presided over by a Minister then the transference of the Immigration Department to the jurisdiction of the Minister of Labor.

(i) Continued adherence and support to the League of Nations and the International Labor Organization created under the Treaty of Versailles, 1919.

Submitted on behalf of the Trades and Labor Congress of Canada.

TOM MOORE, *President.*
ARTHUR MARTEL, *Vice-President.*
ALEX. MCANDREW, *Vice-President.*
BERT. MERSON, *Vice-President.*
P. M. DRAPER, *Secretary-Treasurer.*

Excellent Display of Canadian Toys

The ability of Canadian manufacturers to turn out toys and novelties equal to any imported article of the kind was shown by the "Toy Fair" which had a successful fortnight's run at the Queen's Hotel, Toronto, from February 2nd to 16th. Every available room on the ground floor of the hotel was taken by the large number of manufacturers represented, and every kind of toy, large and small, was shown. In addition there were displays of glassware, pottery, electrical fixtures, lamps, silverware, housefurnishings and novelties. These also were all Canadian-made and a credit to their makers.

The fair was conducted under the able management of M. T. Lester, editor of *Pottery, Glass, House-furnishings and Toys.* He is to be congratulated on the efficient arrangements for the convenience of both exhibitors and buyers.

Space does not permit a full description of the exhibits but all were worthy of attention. A few mentioned here may give a general idea of the variety of lines displayed. A new merry-go-round made by the Hastings Manufacturing Company and demonstrated by a pair of children was one effective drawing-card. The steel construction tops manufactured by the A. C. Gibbert-Menzies Company also attracted a number of visitors.

The Dominion Toy Manufacturing Company, Toronto, who manufacture dolls, had a display filled with variety. Teddy bears, rabbits and dolls of all sizes and colours made a bright and pleasing exhibit.

Bookends, candlesticks and electric lamps were some of the chief lines shown by the Art Statuary & Novelty Company. They also had on view a number of artistic statuettes with a new metallic finish that should meet with a good demand from buyers of artistic furnishings.

The Coleman Fare Box Company, Limited, had a number of garden sets in their exhibit which compared favourably in quality and price with any articles made abroad.

Another attractive display in the pottery and glass section was that of Wallaceburg Glass, Limited. They had a large display of glassware, their specialty being light cut tumblers.

The exhibitors were well pleased with the results of the fair, both from the social and the business side. Many good orders were booked that will give employment to Canadian workmen. When it is remembered that the toy industry is comparatively new to Canada and that not many years ago the trade was practically monopolized by Germany it is remarkable to see the progress Canadian manufacturers have made. This is one line in which Canada can be absolutely self-supporting.

Among the many visitors to the fair was C. Noel Wilde from the Department of Trade and Commerce, Ottawa. He expressed himself as being highly pleased with the splendid showing of Canadian-made toys and intimated that his report to the department would be very favourable. This official approval was echoed by all who were able to attend the fair. Many of the exhibitors are strongly in favour of making it an annual event and this year's success makes the idea seem quite practicable.

Export Company Formed in Vancouver

Having as its object the development of an export trade in Western Canada products, the Canadian Producers Corporation, Limited was recently incorporated in Vancouver. Its directors include Brig. General Victor W. Odlum, C. C. Yount, Victoria; J. Edward Sears, Frank C. Merrick, Fred C. Arnett of Vancouver and Michael Stipeman, London, England. The foreign sales department is under the management of Henry F. Snyder, recently in charge of a large import and export house in the Eastern States and before that with a firm of importers in Amsterdam.

As its first trade emissary, the Corporation sent A. W. Strachan to India on February 5. Mr. Strachan will call at Yokohama, Shanghai, Hong-Kong and Singapore and will make his headquarters at Calcutta. Mr. Strachan has spent many years in India and is familiar with the native dialects so that he hopes to interest not only the English-speaking merchants and importers but the native merchants as well.

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Toronto Brantford Winnipeg Calgary Vancouver

Further Encouraging Reports from Members of the Association

(Continued from Page 62)

DURHAM DUPLEX RAZOR CO., LIMITED, TORONTO:—"We are increasing operations and output and are taking on more hands. We expect to turn out more razors than last year."

"SPRAD" SHOWCARD STUDIOS, MONTREAL:—"Business is better in all departments."

O. U. G. FRUIT PRODUCTS, LTD., VERNON, B. C.:—"The past season produced a very heavy pack of evaporated apples, which are clearing up fast. We expect this year to pack a full line of canned fruits."

TEASDALL HOSIERY MILLS, LIMITED, LONDON:—"The business outlook for us is very encouraging; in fact, at the present time we have more unfilled orders on our books than we have ever had in the history of our business We look forward to 1922 as being one of the best years we have ever had. *We are increasing our capacity about one-third.*"

WHALEN PULP & PAPER MILLS, LIMITED, VANCOUVER:—"We are *operating full blast in all departments*, three pulp mills, two sawmills and three shingle mills and a ready market is obtainable for all products. Pulp production at present is at the rate of 5000 tons per month and shipments are going direct from the mills to Japan and, via the Panama Canal, to New York."

OTTERVILLE MFG. CO., LIMITED, OTTERVILLE, ONT.:—"We are at present working to full capacity, with full complement of hands on full time of 55 hours per week. Business has shown decided signs of improvement during the past two or three months and *we are looking forward to good business during the coming year*. We are installing four new machines to enable us to manufacture at least possible cost and increase our output."

BEAVER WOOD FIBRE CO., LIMITED, THOROLD:—"Due to rapid increase of business the Beaver Board Companies are starting immediately (Feb. 14) another machine at the Thorold mill, which will put the mill on full capacity. The Companies are planning to divert to the Thorold mill, the product formerly being made at Tonawanda, N. Y. *This will keep the Canadian mill operating at maximum production.* The Tonawanda mill, which is now being repaired, will not be reopened before August next at earliest."

DISRAELI BOX CO., DISRAELI, QUE.:—"Our mill is *running at full capacity*, or at least 95%, though how long this will last is very hard to say. As for booking orders, we have not been able to land a contract for a period of say two months or more with any firm for the last six years. We keep a stock of all kinds and sizes of our products on hand large enough to meet the orders at any time, and are able to make prompt shipments. We have had no reason to complain very much about business slacking with us since 1918, but of course profits have been reduced to pretty low figures. We have to face the music on this point same as the others, and our saying is that if a firm is able to hold on during these hard times, they are lucky."

STANDARD FOUNDRY & SUPPLY CO., LTD., WALKERVILLE, ONT.:—"We are comparatively a small concern depending almost entirely on the local manufacturers for our business, conducting largely what is known as a jobbing foundry shop. Our business has not increased any during the past six months but we believe *there is a better feeling existing* and more encouraging signs, and we look for some improvement inside of the next two months, but not to any great extent. Pig iron and scrap in our opinion, are still costing us too much money, but we believe that the high freight rates are to blame for this. Freight rates, also, work greatly against us in trying to get business out of town, so as soon as these are brought in line, we think it will be quite an influence towards improving conditions in the metal trade."

VANCOUVER MILLING AND GRAIN CO., LIMITED, VANCOUVER, B. C.:—"The movement of export grain through this port to Europe and Japan during the past few months has materially increased the volume of our operations. We have booked in excess of a million bushels to date, the major portion of which has been sacked for shipment to Japan. This has necessitated the employment of a number of additional hands as well as keeping our plant operating night and day. We understand between six and seven million bushels of wheat have been sold to go through this port this year, marking the initial start in the western movement of grain to Europe by the Panama Canal as well as to the Orient. Those conversant with the situation are of the opinion that the volume of this business will increase as time goes on and that, in the comparatively near future, Vancouver will become a large grain-exporting centre."

ONEIDA COMMUNITY LIMITED, NIAGARA FALLS, ONT.:—"Our conception of business for the coming year is, there will be quite a decided improvement for the manufacturer. A great portion of this belief is based on the liquidation of jobbers' stocks, as well as dealers'. We have very carefully checked up the comparative inventories of our goods, January 1st,1921, vs January 1st, 1922, in possession of all the jobbers throughout Canada, and we find that, whereas last year they had a great overstock in the majority of instances, this year the *liquidation has been sufficient to bring stocks down to or below a normal working stock.* In addition to this from all information we can gather, the liquidation on the part of the dealer has been equal in proportion to that of the jobber. This means even if general business conditions only correspond with last year, our business would have to be better, and the orders we are beginning to receive this year confirms this."

KITCHEN OVERALL & SHIRT CO., BRANTFORD:—"At the present time we have the usual number on our pay-roll, about 125, and are running four days per week. With the prospect of better business, we are in hopes of running full time by March 1st. Our representatives started out last week, (Jan. 26) and we were very much pleased with the business obtained. Generally speaking stocks of overalls and work shirts are low, and when the shops employing men get back to normal strength, *we anticipate a large demand for workingmen's supplies.* Very little placing business is secured, all of our orders being small and for immediate requirement. Prices are now being stabilized, and we do not expect that we will have a falling market to contend with as experienced in 1921. We are doubling the capacity in our shirt department and expect, with the increased production, to turn out 500 dozen shirts per week. We are very optimistic and are looking for good business to begin about March 1st."

A. T. REID CO., LIMITED, TORONTO:—"With the opening of the present year, we have felt it incumbent to make considerable additions to some portions of our plant in the belief that a healthier condition now prevails generally throughout the trade of Canada, and the buyer, feeling his feet on firmer ground will be in the market for desirable merchandise and in increased quantities. As to booking orders ahead we find the tendency stronger perhaps than ever before on the part of the merchant to make his purchases more nearly related to his immediate requirement, to buy more often and perhaps turn his stock more frequently. While this makes, in a measure, for a hardship upon the manufacturer, creating as it does an added cost to production, we believe that it will throw the buyer into seeking more largely Canadian-made products than when the custom was to buy more heavily for future needs. We have made a small addition to our plant and will add considerable new machinery which will naturally require employing additional help, but are strong in the belief that until European economic conditions become more stabilized and the financial chaos prevailing there is remedied by international agreement, business will not attain a healthy growth or reach its maximum development."

TRENTON COOPERAGE MILLS, LIMITED, TRENTON:—"While as usual at this time of the year we are very busy with our logging operations, and have a normal number of men employed in the bush and at the different loading points, the trade during the month of January did not absorb more than 60% of our normal output. We do not contemplate increasing our operations over 1921, but at the same time our volume of business during that year, in tonnage handled, was on a par with the best years we have had, although prices were most discouraging. It is our belief that cooperage manufacturers can look forward to a much more satisfactory year in 1922 than the season just past. Prices have re-adjusted themselves, output both in Canada and the States will be governed by actual consumption and not expectation, which will have the result of getting the situation back to normal. *So far this year, we have been successful in booking some very nice business* and in fact have been successful in disposing of over one-half the output at one of our plants. While we do not believe that this is the time for additional investment in enlarging plant or fixed assets, our business is undoubtedly increasing and we are very optimistic regarding the progress and prospects of our own company."

THE FORD MOTOR COMPANY OF CANADA LIMITED, FORD, ONT.:—"The Ford Motor Co., of Canada, Ltd., looks forward with confidence to 1922. The production schedule for February, 1922, calls for 4,000 cars and trucks as compared with 3114 manufactured in February, 1921—an increase of approximately 24%. At this rate the *total shipments of 42,349 for the calendar year of 1921 should be exceeded in 1922.* Export shipments are again becoming a more important issue and increased sales in Australasia, India and S. Africa are being prepared for. From February 1st, a 40-hour week at full machine capacity will commence. This will permit of the re-absorption of most of the old employees but will not necessitate the taking on of any new men. The recent price reductions effective January 16th are expected to still further stimulate demand. These range from $25 on the car chassis to $60 on the Sedan and bring all models within a very few dollars of the lowest price ever reached. In fact when it is considered that since the low water mark in prices the one-man top, double ventilating windshield, roller bearings, demountable rims and tire carrier have been added to all car models as standard equipment, the price for value received is far lower than in 1916. No further reductions are in contemplation. In fact it is said by officers of the company that only a high monthly average production will enable these reductions to be maintained."

The Pulse of Business in Canada

THE statistics which indicate the general business situation are not particularly bright, but as the dullness is in many cases seasonal, there is nothing very alarming in the record. In the December bank statement a decrease is shown in both demand and savings deposits. There was also a large decrease in the assets and liabilities of the banks. The January clearings are much lower than last year, Toronto and Vancouver being the only cities to show increases.

Both imports and exports declined during January. Building permits issued during December were less than in the preceding month but greater than in December, 1920. January construction activity was somewhat lower. The seasonal decline in employment occurred in December, but was not so bad as a year ago. Business failures during January were greater than a year ago and fire losses were unusually high. Wholesale prices of exports have begun to show an upward tendency. Railway earnings during December were lower.

December Bank Statement

Large Reduction in Both Assets and Liabilities Shown during Month

A reduction of over $77,000,000 in the total assets of Canadian banks for the month of December, 1921, as compared with the previous month, together with a corresponding reduction of more than $68,000,000 in the total liabilities, is shown by the monthly bank statement covering the month of December, issued by the Department of Finance. Total liabilities of Canadian banks in December, 1921, were $2.472,350,424, as against $2,541,336 278 in November, 1921, and 2,778,308,547 in December, 1920. December, 1921, assets were $2,746,732,605, as compared with $2.824,130 507 in November, 1921, and $3,056,979,489 in December of the present year.

Deposits, both notice and demand, and those outside of Canada, decreased during the month, and an increase of almost three millions in note circulation is shown. The summary follows:

	Dec., 1921	Nov., 1921	Dec., 1920
Reserve fund	$ 128,373,490	$ 135,223,499	$ 133,048,505
Note circulation	184,602,546	181,953,001	228,758,587
Demand deposits	540,942,522	555,901,112	657,496,742
Notice deposits	1,240,807,268	1,252,227,394	1,293,007,488
Deposits outside Canada	270,721,507	285,217,706	356,771,009
Current coin	78,851,283	81,671,381	82,687,559
Dominion notes	195,703,154	198,821,730	177,489,290
Deposit C. G. R.	68,452,533	69,402,533	113,362,533
Call loans, Canada	113,071,089	104,392,115	114,703,246
Call loans, outside	169,859,037	193,001,119	211,442,652
Current loans, Canada	1,174,053,434	1,210,101,634	1,301,804,342
Current loans, outside	145,343,054	144,340,080	184,540,423
Total liabilities	2,472,350,424	2,541,336,278	2,778,308,547
Total assets	2,746,732,605	2,824,130,507	3,056,979,409

Building Conditions

Construction Activity in January was Slightly Lower than Last Year.

Construction activity in Canada according to figures compiled by MacLean Building Reports, Limited, during the month of January, amount to $8,392,600, compared with $8,947,500 in January, 1921. The figures for the different Provinces are as follows:

	No. of Projects	Value
Ontario	380	$6,609,200
Quebec	74	640,600
British Columbia	74	632,800
Nova Scotia	11	248,000
New Brunswick	12	154,000
Saskatchewan	5	40,500
Manitoba	9	37,500
Alberta	6	30,000
Total for Dominion	571	$8,392,600

Wholesale Prices

Canadian Bank of Commerce's Index Number Indicates Upward Tendency

The index number of wholesale prices of exports, published by the Canadian Bank of Commerce, has risen from 143.43 on December 15th to 147.17 on January 15th, the first movement upwards since August of last year when prices showed a slight tendency to recover. The present movement is accounted for mainly by better prices for wheat, cattle and hogs. Spruce, copper and hides have also risen; wool is steady but shows a tendency to rise.

The index number for imports has fallen from 148.10 to 147.88 which is in some measure the result of the decrease in the premium on New York funds. Cotton, rubber and sugar are chiefly affected by this movement. The combined number for exports and imports has risen from 145.76 to 147.52.

Trade Returns

January Exports and Imports Register a Further Decline

Exports and imports during January registered another decline both as compared with the previous month and with the month of January, 1921. The decline in imports from a year ago is mainly shown in agricultural and vegetable products, iron and steel, minerals and manufactures thereof. Imports of fibres, textiles and textile products increased by some three millions.

The total decline in exports is about 40 millions as compared with December and about 33 millions as compared with January, 1921. Except for ores, metals and metal manufactured other than iron and steel, which have increased slightly, the decline is general, the principal decrease being in foodstuffs. Below is given the summary compiled by the Department of Customs:—

IMPORTS ENTERED FOR HOME CONSUMPTION

	Month of January 1921		1922	
	Free	Dutiable	Free	Dutiable
Agricultural and vegetable products, mainly foods	$2,278,702	$6,553,450	$1,864,356	$4,653,477
Agricultural and vegetable products, other than foods	2,212,649	4,773,093	1,781,569	2,911,525
Animals and animal products	924,664	2,730,385	2,231,121	2,273,982
Fibres, textiles and textile products	2,967,821	6,980,649	4,053,813	8,176,068
Chemicals and chemical products	696,777	996,552	751,362	930,778
Iron and steel, and manufactures thereof	2,015,129	12,119,195	538,833	5,819,879
Ores, metals and metal manufactures, other than iron and steel	722,785	2,099,895	428,768	1,493,646
Non-metallic minerals, and products	5,783,917	10,488,638	4,493,879	3,703,064
Wood, wood products, paper, and manufactures	1,254,278	2,475,402	858,535	1,593,581
Miscellaneous	2,114,405	2,033,537	1,189,861	1,728,156
Total	20,971,127	51,281,096	18,192,097	33,284,156
Duty collected		10,063,618		8,980,120

EXPORTS

	Month of January 1921		1922	
	Domestic	Foreign	Domestic	Foreign
Agricultural and vegetable products, mainly foods	$35,996,216	$ 51,992	$14,999,484	$ 83,604
Agricultural and vegetable products, other than foods	1,728,222	70,047	978,610	73,563
Animals and animal products	13,379,801	71,806	9,468,754	77,553
Fibres, textiles, and textile products	2,630,526	152,552	246,609	65,721
Chemicals and chemical products	852,560	10,820	724,860	15,353
Iron and steel, and manufactures thereof	4,635,564	313,743	1,899,583	273,503
Ores, metals and metal manufactures, other than iron and steel	2,347,868	71,831	2,447,444	88,427
Non-metallic minerals, and products	2,895,646	42,225	1,314,284	73,942
Wood, wood products, paper, and manufactures	15,672,698	91,808	13,381,294	33,372
Miscellaneous	773,715	144,218	737,158	114,566
Total	80,912,816	1,021,042	46,198,080	899,604

Business Failures

Number of Failures Reported by Bradstreet's Show Increase over Last Year

Business failures in Canada, as reported by Bradstreet's still show an increase. For the last three weeks of January and the first week of February they total 304, or over double the number reported for the corresponding weeks last year. Following are the returns for the four weeks with comparisons:

Week Ending	1922	1921
January 12	88	39
January 19	73	50
January 26	77	27
February 2	66	31
Total	304	147

Bank Clearings

Only Two Canadian Cities Show Increases during Month of January

Toronto and Vancouver were the only cities to show increases in bank clearings for the month of January, as compared with the same period in 1921. Toronto showed an increase of $27,094,872, or 6.5 per cent., while Vancouver was ahead $597,031, or 1.1 per cent. The total clearings for the Dominion showed a decrease of $124,631,210, or 8.6 per cent. Thirteen Eastern cities were behind to the extent of $38,482,711, or 3.6 per cent., while a like number of Western points showed a falling off amounting to $86,148,499, or 21.8 per cent. The heaviest loss—37.8 per cent.—was in the case of Calgary.

The following tables give the clearings for the month, with comparisons:

EASTERN BANK CLEARINGS

	Month of January	Increase over '21	Inc. p.c.
Toronto	$441,460,191	$27,094,872	6.5
Montreal	450,128,863	x44,573,161	9.1
Hamilton	21,307,146	x5,083,086	19.2
Quebec	22,070,005	x3,845,949	14.8
Halifax	13,748,001	x3,539,951	20.4
St. John	11,516,962	x1,412,758	9.1
London	13,694,381	x2,126,243	13.4
Windsor	11,480,379	x1,204,714	9.5
Brantford	1,643,338	x1,388,855	23.02
Kitchener	4,045,337	x14,083	.3
Moncton	3,980,880	x197,357	1.7
Sherbrooke	3,437,263	x1,368,567	28.4
Peterboro'	3,065,530	x822,849	21.1
Total	$1,094,578,306	x$38,482,711	3.6
Ottawa	27,783,821	.....	.....
Kingston	3,247,822	.....	.....

WESTERN BANK CLEARINGS

	Month of January	Increase over '21	Inc. p.c.
Winnipeg	$173,841,793	x$80,927,099	25.9
Vancouver	54,150,696	597,031	1.1
Calgary	21,307,731	x12,558,591	37.8
Edmonton	18,416,519	x3,761,871	16.9
Regina	14,386,809	x3,434,295	19.2
Saskatoon	7,009,457	x1,446,170	17.1
Moose Jaw	5,107,264	x1,660,803	24.6
Fort William	4,021,773	x246,210	5.7
Lethbridge	2,536,424	x487,551	16.1
Brandon	2,355,978	x669,154	22.1
New Westminster	1,988,033	x444,715	18.2
Prince Albert	1,463,690	x532,983	26.7
Medicine Hat	1,455,815	x573,008	28.2
Total	$308,041,782	x$86,148,499	21.8
Total East	1,094,578,306	x38,482,711	3.6
Grand Total	$1,312,620,088	x$124,631,210	8.6
Victoria	8,906,373	.....	.....

x Decrease.

Railway Earnings

Canadian Pacific and Canadian National Railways Both Show Decrease

Although the gross earnings of the Canadian Pacific Railway decreased steadily during 1921 the net returns for the year were greater by $1,048,695 than for 1920. During December there was a decrease both in gross and net as compared with the figures of the preceeding month and with those of December, 1920.

The Canadian National Railways also showed a decrease in gross earnings during December but that in the last week of the month was the smallest. Following are the December figures for the two railways:—

CANADIAN PACIFIC RAILWAY

	December, 1921	December, 1920	Decrease
Gross earnings	$15,756,923	$20,604,167	$ 4,847,244
Expenses	13,839,142	18,382,095	4,542,953
Net earnings	1,917,781	2,222,072	304,291

CANADIAN NATIONAL RAILWAYS

Week Ended	Gross	Decrease	P. C.
December 7	$ 1,939,300	$ 839,006	27.6
December 14	2,048,170	502,079	19.6
December 21	2,009,393	590,781	22.7
December 31	2,478,465	460,921	15.6

EXPERTS

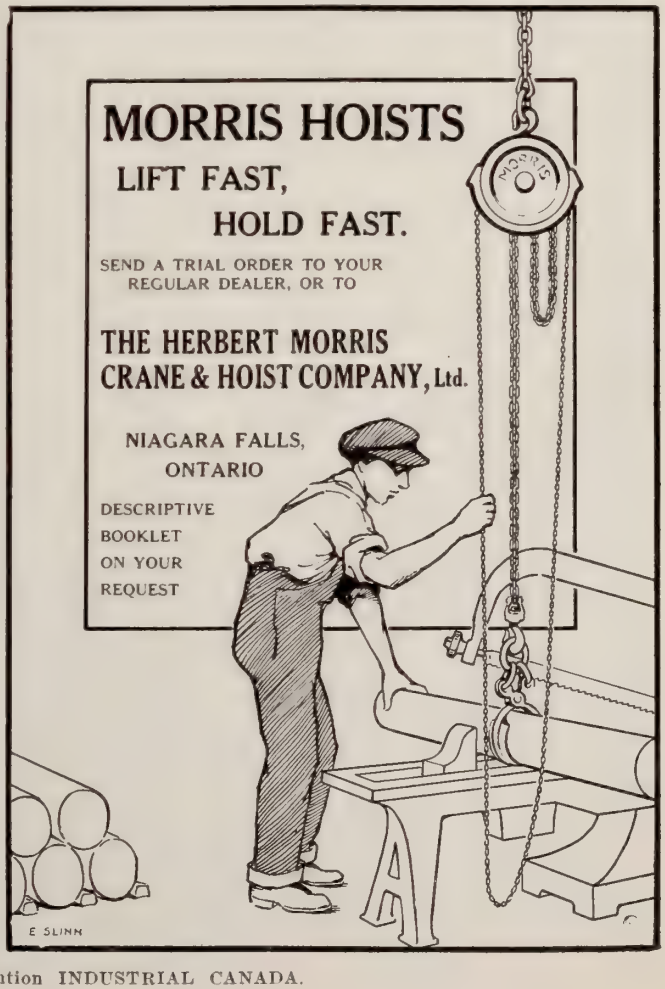
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Statements in Regard to Trade and Commerce

(Continued from Page 54)

ment accorded them, the British Papermakers appealed to the loyalty of the Australian Commonwealth on behalf of Empire solidality, the needs of the returned soldiers, the desirability of keeping Australian money within the Empire, and on "the still higher grounds of patriotism."

9. That on none of these grounds is Canada entitled to any less consideration than that accorded any other part of the British Empire;

10. That the action taken by the Australian Parliament in excluding Canada from the preference accorded Great Britain, and on the grounds stated, constitutes discrimination against Canada as a sister dominion within the Empire and is in direct conflict with Australia's attitude at the Imperial Conference held in London in 1920 and which was set forth by the Prime Minister, the Honorable W. M. Hughes, in a statement made before the British Empire League, in London on August 22nd, as follows:

"Our safety, our prosperity ,our existence, our future, depend upon united action, and we solemnly resolved that to the outside world we are not many, but one. For good or evil we resolved to tread that path, and it was a wise resolution.

We depend upon each other, not only for safety and security but for daily bread. The Dominions and the people of these islands are bound by many ties, but by none more real and lasting than those of buyer and customer. The Dominions are the best customers England has got, and Great Britain is the best buyer in the world of the products of the Dominions."

11. That we have been informed and have reason to believe that the Australian Government is not unwilling to extend the preferential tariff on paper to Canada provided definite negotiations to that end are undertaken by the Canadian Government and suitable concessions are made in return,—

12. That the urgency and importance of the matter justifies the Canadian Government in taking immediate and forceful measures.

We, therefore, urge upon the Government the desirability of instituting the necessary steps to restore and maintain this industry's opportunities to trade in the Australian market without delay.

"Produced-in-Canada" Train to France

THE Executive Council of the Canadian Manufacturers' Association have given consideration to the proposal to have Canada's resources shown in an attractive, picturesque and practical way by means of an Exhibition Train and standing exhibit to the people of France.

The proposal includes a specially fitted up train bearing exhibits of the produce of Canadian mines, forests, fisheries, fields and factories; the showing throughout the cities and towns of industrial, agricultural and scenic motion pictures portraying Canada's resources and beauty; and the establishment of a standing exhibit for six months in a suitable building in Paris for the convenience of buyers and the general public.

It is suggested that these different features would bring forcibly to the attention of the business men and the general public in France, the claims of Canada as a producing nation and as a suitable field for enterprising and industrious people in France who may desire to immigrate.

When we recall the noble effort made by war-stricken France in 1921 to show her friendship for Canada by the tour of the French Train through Canada, and when we recall the sympathetic and practical co-operation and hospitality of the Canadian Government, it may in all fairness to France be assumed that the French Government will be ready to reciprocate.

As a medium of publicity for Canada, the Executive council feel convinced that no better or more comprehensive plan could be advised, and its ultimate effect on immigration and export trade can confidently be left to the experience and to the imagination of all believers in publicity.

In order to ensure the complete success of the project, we would deem it necessary to make the series of exhibits fully representative of all phases of Canadian activity, and we would urge the Government to handle this proposal as a national project, assuming the cost of management and arrangement of exhibits. The Council can promise its hearty co-operation in advancing the interests of this notable exhibition tour.

The Council hopes that the Government will give this matter its immediate attention to the effect that this project may be carried out in the early future whilst sympathy for Canada is running at its highest pitch in France.

Establishment of a National Bureau for Industrial Research

FROM a national standpoint governmental expenditure with the object of improving the quality or increasing the quantity of any class of production, is at all times advisable. This has been recognized by Governments in the past in connection with agriculture, technical education and re-forestation.

From an industrial standpoint, the method by which the greatest assistance can be rendered by the Government to manufacturers is the establishment of an Industrial Research Bureau, with facilities for conducting experiments which must of necessity be carried on for the development of manufacturing.

Probably no single factor was more conducive to the rapid expansion of Germany industrially, than was the assistance rendered by the German Government in this manner. In recent years an attempt has been made along such lines by the Honorary Advisory Council for Scientific and Industrial Research, but as the services of those connected with the Council were given voluntarily, and as no facilities were placed at their disposal for experiments, their accomplishments while valuable, were necessarily limited.

The Canadian Manufacturers' Association realizes that at the present time, new expenditures should be incurred only for pressing necessities or where they will result in benefits fully justifying the outlay. We believe that the good results which will accrue from an appropriation necessary to provide accommodation, equipment and staff, for a Bureau of Standards and Research at Ottawa, would in a short time, increase the national wealth out of all proportion to the expenditure entailed, and we consequently request the Government to give such proposed expenditure their earnest consideration.

The Commercial Intelligence Service

THE Canadian Manufacturers' Association has never ceased to emphasize the importance of the work, both at home and abroad, carried on by the Government Commercial Intelligence Service of the Department of Trade and Commerce.

This Service has been characterized not only by an increasing staff of businesslike commissioners, but by an important increase in personal and business efficiency.

To manufacturers entering export fields for the first time, the assistance of the Trade Commissioners is invaluable in advising them as to the probable extent of their market in a given territory, in putting them in touch with reputable agents and in furnishing a means of skilfully overcoming difficulties that may arise with customers.

The Weekly Journal of the Service also shows a continuous increase in usefulness by putting forward in concrete shape many opportunities for trade and bringing to the attention of exporters vital points concerning their business.

The series of reports prepared on India, Africa and parts of Europe are valuable and in addition to the information committed to print, augment greatly the personal experience of the members of the Service who gather the materials for these reports and thus put a still greater reservoir of information derived from personal contact at the disposal of Canadian manufacturers.

We recognize fully the vital importance of economizing in public services, but in business a firm which found its sales diminishing and sought economy by reducing its travelling staff would rightly be considered as taking a retrograde step. While not actually engaged in selling, the Trade Commissioners in a larger

way take on the function of salesmen by forming an essential link between the Canadian exporter and his prospective customers and representatives in other lands. Therefore, we do urge the Government not to lay too great stress on saving where the Government Commercial Intelligence Service is concerned.

It ought not to be true that the Trade Commissioners and the Officers in Ottawa should be so fully engaged in routine work that little time and energy can be spared to cultivate a close acquaintance with Canadian products and with the industries and commerce of the other parts of the world where the outside service is located.

The Service is one which in proportion to its size compares favorably with that of any other country, and we do urge that while paying the closest attention to efficient operation, the Government will see its way clear to maintain or increase the high standard set and to support this excellent Service in the way it fully deserves.

The Prime Minister replied on behalf of the government and promised careful consideration of the statements submitted. He added that the government was in communication with the Australian government in regard to the proposed preferential tariff—and that negotiations were proceeding.

Building Permits

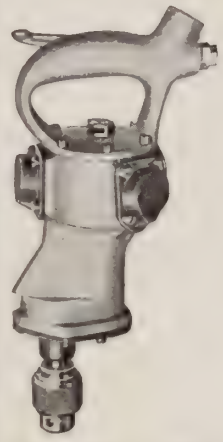
General Decrease in Value of Permits Issued during December, 1921

The value of building permits issued in fifty-six cities was lower during December than in November, declining from $10,958,066 in the latter month to $5,072,117 in the former, a contraction of $5,885,949, or nearly 54 per cent. As compared with the corresponding month of 1920 there was an increase of $405,580 or 9 per cent., the permits issued in December, 1920, having totalled $4,666,537. All provinces with the exception of Alberta reported decreases in comparison with November, that of $5,289,244, or 82 per cent. in Quebec being the largest.

As compared with the corresponding month of 1920, Quebec and Ontario alone showed advances, the increase of $729,094, or 33 per cent. in Ontario being the most conspicuous. British Columbia showed a decided decline, the value of permits dropping from $947,230 in November to $528,802, in December, a contraction of 44 per cent. Of the larger cities, Montreal and Vancouver reported decreases in the building estimated, both as compared with November, 1921, and with December, 1920, while Toronto reported an increase in both cases. At Winnipeg a reduction was indicated in comparison with the preceding month, but the value for December was slightly in advance of the figure for the corresponding month in 1920.

The comparative figures for the fifty-six cities are shown in the following table:

	Nov. 1921	Dec. 1921	Dec. 1920
P. E. Island	.....	.....	.....
Nova Scotia	128,991	47,185	52,925
New Brunswick	71,850	25,300	202,808
Quebec	6,490,403	1,201,159	878,240
Ontario	3,263,317	2,916,736	2,187,641
Manitoba	146,275	104,080	114,127
Saskatchewan	153,660	24,180	57,315
Alberta	147,115	224,675	226,250
British Columbia	556,455	528,802	947,230
Total, 56 cities	$10,958,066	$5,072,117	$4,666,537



Nos. 6 and 600

LITTLE DAVID DRILLS

Modern production methods have developed the need for light high speed tools for the rapid drilling of holes up to ⅜" without drill breakage. The No. 6 and 600 LITTLE DAVID DRILLS are designed for this work and are smooth running and free from vibration either under load or when running free. The motor is of the three-cylinder type running in a bath of oil and the cylinders are interchangeable. The No. 6 weighs 9 pounds and is fitted with a pistol grip while the No. 600 weights 11½ pounds, has a rolling throttle type handle and breast plate. These tools are adapted to automobile body work drilling boiler telltale holes, etc. and may be equiped with a wire brush attachment for cleaning rust, paint or scale from iron or steel structure, surfacing brass, iron or aluminum castings etc.

Descriptive bulletin sent on request.

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Limited

Sydney Sherbrooke Montreal Toronto
Cobalt Winnipeg Nelson Vancouver

Ingersoll-Rand

SALES EXECUTIVE

Sales Executive having long practical experience with leading manufacturers and distributors, mainly food products, desires to form connection with aggressive manufacturing concern. Has a thorough acquaintance with Canada having covered the Dominion from coast to coast, and with Great Britain and can furnish highest references from employers, their bankers and chartered accountants.

A former employer writes,—"Mr. ———— is a born salesman, possessing in a marked degree that tact, energy and good address so essential, and he seems to have the power of infusing those under him with the same spirit. As a general business man, he is thoroughly up to date and a splendid organizer and we cannot speak too highly of the valuable services he has rendered."

Address reply to "Sales Executive", care of INDUSTRIAL CANADA, 1301 Bank of Hamilton Building, Toronto.



SHAFTING

Cold Drawn, Cold Rolled
Turned and Polished Steel
FINISHED KEYS

The Canadian Drawn Steel Co., Ltd

HAMILTON, CANADA

Deaths Among Prominent Manufacturers

Henry Schaake

Founder of Schaake Machine Works and Schaaks Company, Limited, Vancouver

Henry Schaake, manager of the Schaake Company, Granville Island, Vancouver, died at his home in New Westminster on January 31st after an illness of several months' duration. The late manufacturer was the founder of the Schaake Machine Works in New Westminster several years ago. He afterwards sold this plant to the Heaps Engineering Company. In 1914 he founded the present Schaake Company, Limited. This was originally located in New Westminster, but shortly after its formation the plant was moved to Granville Island. Mr. Schaake was a member of the Board of Trade and several other local organizations.

George Robert Smith

Vice-President and General Manager of the Asbestos Manufacturing Company, Montreal

Hon. George Robert Smith, member of the Legislative Council for Megantic, Quebec, and for many years a prominent figure in the Canadian asbestos industry, died on February 20th, at Thetford Mines.

Mr. Smith was born at Newark, U.S.A., in 1860. When still a young man he came to Canada in connection with the mining industry of the Ottawa region. The asbestos deposits were beginning to attract general attention and he became active in their development. He held the position of vice-president and general manager of Bell's Asbestos Company, at Thetford Mines, and vice-president and general manager of the Asbestos Manufacturing Company of Montreal. He was one of the founders of the Canadian Mining Institute, of which he was for some time president. When he retired in 1907 the council of the Institute presented him with a silver tea service in acknowledgement of his services. He was interested also in other commercial enterprises and was a member of the Montreal Board of Trade.

Mr. Smith sat in the Legislative Assembly for Megantic from 1897 till 1909, and took active interest in elementary educational work in the province. In 1911 he was appointed a member of the Legislative Council.

Fire Losses

January Record Reaches Unusually High Figure of $3,597,500

January fire losses, according to *Monetary Times'* records, were $3,597,500, an unusually high figure. It is made up as follows:—

Fires exceeding $10,000	$2,989,000
Small fires reported	108,500
Estimate of unreported fires	500.000
Total	$3,597,500

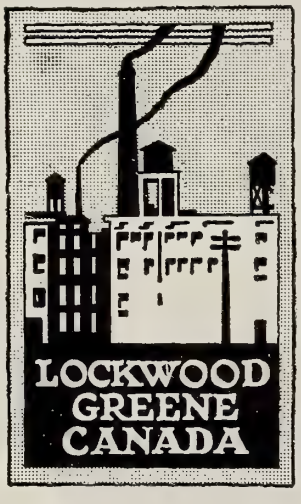
This total is over one million dollars greater than the loss for January, 1921, which was $2,237,900.

The S. Shore Candy Factory, Winnipeg, have enlarged their plant by building an addition to the rear of their old factory. They have been working full time since last August and have recently taken on a few more hands.

Riverside Iron Works, Limited, have been adding some new machinery to their plant in Calgary. They are also thinking of building a new foundry but it has not been decided whether or not this will be started during the present year.

The Preston Woodworking Machinery Company, Limited, Preston, Ontario, state that, if conditions warrant it, they may complete an 80x100 feet extension to their plant which they have had under consideration for a year or so.

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Engineering Service for Industry

Canada's Industrial Expansion

A RECORD OF PROGRESS

Concentrator Contracts Let

Britannia Mining and Smelting Company Commence Large Building Programme

Contracts for structural steel for rebuilding the big ore concentrator and a wrecked bridge have been awarded by the Britannia Mining and Smelting Company, Britannia Beach, British Columbia, and work will shortly commence. The company invited bids from Canadian firms only and the tenders of three Vancouver companies were accepted.

The largest single contract in the rebuilding programme is that for the supply of structural steel for the ore concentrator and mill. The structural steel required for this building, amounting to nearly 1,300 tons, will be fabricated by the Canadian Northwest Steel Company at their Vancouver plant. The erection of the steel work will be done by the Canadian Northwest Steel Company and by Richard Tench of Vancouver.

The concentrator, which is to occupy a site a short distance west of the burned mill, will be a building 209x270 feet. It is located on the mountain slope and is designed to allow economical ore handling by gravity. The concentrator building will extend down the hill in a series of six steps. It will be roofed with corrugated iron and except where it is absolutely unavoidable no combustible material will be used throughout the plant.

An important item in the construction programme is the rebuilding of the wrecked railway bridge which was carried away in the flood of November 28th. This will be rebuilt in permanent form, steel and concrete construction being used. Hodgson, King and Markle will make an immediate start on the building of the concrete abutments.

The total cost of the new work will be in the neighborhood of $200,000.

Will Increase Output

Enterprise Foundry Company, Limited, Complete Addition and Install New Machines

The Enterprise Foundry Company, Limited, Sackville, New Brunswick, have completed a new steel shop, 150x50 feet, for making bodies for steel and gas ranges, and a wing, 30x50 feet for japanning. A number of new sheet metal working machines have been installed in the additions and those in the main plant have been moved in. By these improvements the output of this department will be considerably increased.

As the plant now covers so much ground that power can no longer be advantageously transmitted by shafting, part of it is being electrified. Another new development is the installation of a large air compressor which will be used for sand blasting and other foundry work.

Plant Working Sucessfully

J. D. Mantion Perfects New Match Making Process at Nelson, B.C.

The experimental match plant established in Nelson, British Columbia, by J. D. Mantion, is working successfully and there is every prospect of its ultimately developing into a large and important industry. The process of manufacture is a new one originated by Mr. Mantion and has as its chief advantage the fact that green timber can be used for the splints.

In the process of manufacture the timber is sawn into planks and planed down to 3 inches thickness. These are cut into blocks as long as a match which are then fed into a splint cutter which turns out match splints at the rate of 20,000 a minute. From this machine the splints pass through a chute to a series of endless chain plates made of perforated iron and placed one below the other. By subjecting these to a very high temperature the wood is seasoned, while sawdust, stray chips and foreign matter are discarded through the perforations. The dried product is automatically passed on to a belt conveyor and carried through a paraffin mixture which impregnates each splint. In one continuous automatic movement the splints are dipped into a safety composition and then receive the ignition point. Following this the matches are trimmed by machinery to equal lengths and a belt conveyor carries the finished matches to girl employees who stack them in boxes.

It is also intended to manufacture the splints on a large scale for dispatch to Winnipeg where another plant is contemplated to supply matches to the East.

Enlarging Blacking Plants

Boston Blacking Company, Montreal, Improve Old Factory and Complete New One

The Boston Blacking Company have just finished installing new machinery in their plant at 152 McGill Street, Montreal, by which they have nearly doubled its capacity. They are now engaged in enlarging their cement plant at Cote St. Paul by putting in new boilers and other machinery and improvements.

In the company's North End plant, which has just been finished, they are now busy putting up the L. H. Packard line of paste blackings and bottled goods which they have taken over as well as their own "Boston Specialty Line" of paste blackings, bottled goods, straw hat dye and automobile specialties.

New Oil Company

Red Star Refineries, Limited, to Build Large Plant in Montreal

Red Star Refineries, Limited, are a recently organized company who are now selling stock preparatory to establishing a large plant in Montreal. They have secured a site in the East End of the city with railroad and harbour privileges and are now ready to proceed with the construction of the first unit of a plant capable of producing 1,000 barrels of refined oil a day. The ultimate daily capacity will be 10,000 barrels.

Hon. Senator N. A. Belcourt, K. C., the senior member of the law firm of Belcourt, Leduc and Genest, Ottawa, is president of the new company. T. A. Hilburn, a practical oil man of considerable experience, is vice-president and general manager. The other directors are: F. W. Stewart, managing director of Cluett, Peabody & Company of Canada, Limited; H. W. Austin, managing director of Julius Kayser & Company, Limited; J. S. Stanford, president of Stanfords, Limited; J. McNaughton, a corporation lawyer, and J. S. Giles, editor and proprietor of *The Watchman*, Lachute, Quebec.

There are no bond issues. The company are offering an issue of $1,000,000 preferred stock, and $2,000,000 of common.

Printing Plant Expanding

Hurley Printing Company, Limited, Adding New Machinery and Equipment

Considerable expansion has taken place in the plant of the Hurley Printing Company, Limited, Brantford, Ontario, during the past year. Two Monotype typesetting machines have been added to the equipment and a contract has just been let to Purdy, Mansell, Limited for the installation of a system of Grinnell Automatic Sprinklers throughout the building.

The Dominion Dress Goods Manufacturing Company who occupy the upper storey of the Hurley Printing Company's building, have purchased a new site, and are going to build at once. When they move out the Hurley plant will be considerably increased, and the present congestion will be considerably relieved.

Companies Amalgamated

Collins, Never Fail Products, Limited, Now Making Poultry Supplies at Hamilton

An amalgamation of the Collins Manufacturing Company, Limited, Toronto, with the Never-Fail Products, Limited, Hamilton, has been consummated, and the new company, hereafter to be known as Collins, Never-Fail Products, Limited, are turning out a large supply of their products in their new plant at Hamilton.

The main products of the company are in the nature of poultry supplies, especially adapted for the Canadian climate. These include mash and bran hoppers and troughs, grist boxes, fountains and feeders for baby chicks, watering devices for full-grown fowl, incubators, brooders and hovers, trap nests, show coops, leg bands and feed hoppers.

The company also make a large line of sprayers for vegetables and plants, stove pipe, registers, ash sifters, oil and gasoline cans, etc. Hitherto the bulk of poultry supplies has been purchased from the United States, but the company feel that they can enter into effective competition in these lines as they are strictly up-to-date and can be produced at a price as low as or lower than the imported articles.

Move to Dundas

Kasutine Company, Limited, Acquire Control of Dominion Welded Products Company

The Kasutine Company, Limited, formerly located at 28 Eastern Avenue, Toronto, have moved to Dundas, Ontario, where they have acquired control of the Dominion Welded Products Company. The latter company commenced operations in Dundas last July manufacturing steel tanks for water, gasoline and oil storage and all welded smoke stacks. Since August of last year they have been under contract to supply the Kasutine Company with steel tanks used in waterless toilets.

J. F. Crowley, formerly district sales manager of the Davis-Bournonville Company of Toronto, is now president and general manager of the Dominion Welded Products Company. The Toronto office is located at 164 Bay Street with T. G. Griffith, general sales manager in charge. There are also branch offices in Ottawa, Montreal, Halifax, Winnipeg and Vancouver.

The Dominion Welded Products Company recently secured an order from Page-Hersey Tubes, Limited, for two large smoke stacks for immediate delivery. Both stacks are 38 in. in diameter and 60 feet high. One has an oval base and one a rectangular base made from ⅛ inch plate.

Household Products, Limited

New Regina Company Now Manufacturing Polishes, Cleansing Articles, etc.

Household Products, Limited, are a new company established at Regina, Saskatchewan, for the manufacture of furniture polish, leather upholstering dressing, auto polish, auto cleanser, floor waxes, bath salts, kitchen utensil cleansers, floor polishes, stain removers, water softeners, hand soaps, shoe polishes, brass and copper polishes and all similar household articles. They possess about twenty formulas for cleansing articles and are carrying on operations with the advice and guidance of the Milton Hersey Company, Limited, industrial engineers and chemists, Montreal.

The present plant is large enough to turn out 1500 bottles a day with a staff of three, but the company own a site upon which they can erect a building large enough for a staff of 100 people. At present they have eight employees.

Sales operations of the new company started on January 4th, and the company have already six jobbers and thirty-seven dealers handling their products while most of the public buildings and banks in Regina are using them. The sales organization is planned to cover the entire west, not only for the distribution of the company's own products, but also to represent and distribute products of Eastern manufacturers.

Household Products, Limited, are organized under a Saskatchewan provincial charter at the present time, but they intend to change to a Dominion charter.

Manufacturing Space To Let

We have about 100,000 feet of manufacturing floor space to dispose of on lease

Situated Within the Limits of Montreal

AND ALL ON ONE FLOOR

Building is splendidly lighted; insurance rates are lowest of any in Canada; excellent shipping facilities; railway siding adjoining the building. Can be had for long or short period of years.

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CARON BROTHERS

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We always carry in stock large stocks of materials which enables us to make quick deliveries.

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The knowledge gained in applying electricity to numerous uses is available to all who wish to get the utmost in service from power equipment.

A Hydro engineer will be glad to call on you and give expert advice regarding electrical installations.

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226-228 YONGE ST., TORONTO

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THE noon day meal means so much to a man who has to perform manual labor, that the question of procuring a good one for him should interest all employers.

The solution to the problem is the Cafeteria in connection with the Factory. By this means, a hot meal can be obtained under sanitary conditions at a small cost.



Our Equipment has rendered efficient service in our own Factories so that we can thoroughly recommend it to others. An inquiry to any of our Branches will bring expert advice as to the best method of meeting with your requirements.

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Branch Offices and Warehouses:
Toronto, Montreal, Winnipeg, Vancouver, St. John, N.B., Hamilton, Calgary, Saskatoon, Edmonton

Open Newmarket Branch

T. Sisman Shoe Company, Limited, Effect Considerable Increase in Output

The T. Sisman Shoe Company, Limited, Aurora, Ontario, have recently opened a branch fitting room in the neighboring town of Newmarket, where they are now employing from fifteen to twenty-five girl hands with excellent results. At considerable expense they have equipped this branch with the latest machinery obtainable and expect to be located there permanently. The advantages of the new establishment are the fact that they have been enabled to secure a supply of female labour not available at their main factory and an increase in output of some 240 pairs of shoes a day. This increased output has made possible the employment of from 15 to 25 more male operators at the main plant and has given the company a considerably larger volume of business.

The company have also added to their factory a three storey and basement building about 50 feet square and have located their offices in the middle of this building. They have also added a complete shipping room with a dial recording scale at the main shipping door to that all incoming and outgoing shipments are thoroughly checked.

To Extend Business

Stuart Biscuit Company, Limited, Montreal, Plan Extensive Additions to Plant

The Stuart Biscuit Company, Limited, Montreal, have been incorporated for the purpose of acquiring and extending the present successful business of the Stuart Company, Incorporated, manufacturers of English hard sweet and other fancy biscuits, at 173 Laurier Avenue, Montreal.

It is the intention of the directors to make extensive additions to their buildings, plant and machinery, which will enable the company to add the production of soda biscuits to the lines they are at present manufacturing. With the completion of the proposed addition the company will have an attractive and up-to-date plant, the equal of anything of its kind in Canada.

The directors of the new company are:— W. J. Stuart, president, E. J. Stuart, vice-president; D. A. Cuke, secretary-treasurer; B. H. Brown, A. H. Brittain and George R. Took, all of Montreal.

Overall Plant Purchased

Peters Pollock Company, Limited, Succeed H. S. Peters, Limited, at Welland, Ontario

The plant and interests of H. S. Peters, Limited, overall manufacturers in Welland, Ontario, have been purchased by the Oshkosh Overall Company of Oshkosh, U.S.A. The Welland company will be known in future as the Peters Pollock Company, Limited. They will continue to manufacture the "Brotherhood" brand of overalls which H. S. Peters, Limited, have been producing at Welland for the past twelve years and will also manufacture the "Oshkosh B'Gosh" brand, the product of the purchasing company. C. E. Surman will remain as manager and speed up production on both patterns.

The Oshkosh company control a material known as Mill-Shrunk. No-Fade Denim, from which their overalls are manufactured. It was originated by them and is woven for them exclusively by one of the large denin mills.

The necessary changes to meet the requirements of the new brand are now being made in the Welland plant, and it is expected that a much larger staff will be taken on. W. E. Pollock is president and treasurer of the new firm; E. C. Crawford, vice-president and secretary; and C. E. Wittmack, sales and advertising manager.

The Canadian Top & Body Corporation, Limited, Tilbury, Ontario, have enlarged their lumber kiln equipment by the erection of two large kilns. This will give them a capacity of 150,000 feet of kiln dried lumber a month.

The North American Furniture Company, Limited, Owen Sound, Ontario, have just completed the installation of a fine new factory showroom, where a permanent exhibit of their products will be on view. The company have recently made a shipment of furniture to Egypt, where they are expecting an increasing demand for their wares.

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LIMITED
General Contractors for Buildings

Contracts Successfully Completed or under Construction for the Following;--

Swift Canadian Co. Ltd	Toronto
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Can. Fairbanks Morse Ltd	Toronto
The Cowan Co. Ltd	Toronto
Howell Warehouses Ltd	Toronto
Albert Kerr Co. Ltd	Toronto
Can. Pacific Railway Co	Toronto
Dominion Bank	Toronto
Imperial Bank	Toronto
Blatchford Calf Meal Co	Toronto



Windsor Separate School Board	Windsor
Corporation of City of Windsor	Windsor
E. N. Bartlett	Windsor
R. H. & J. Dowler	Windsor
Champion Spark Plug Co	Windsor
Healey, Page & Cappus	Windsor
Walkerville Land & Bldg. Co.	Walkerville
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Canada Cycle & Motor Co. Ltd.	Weston
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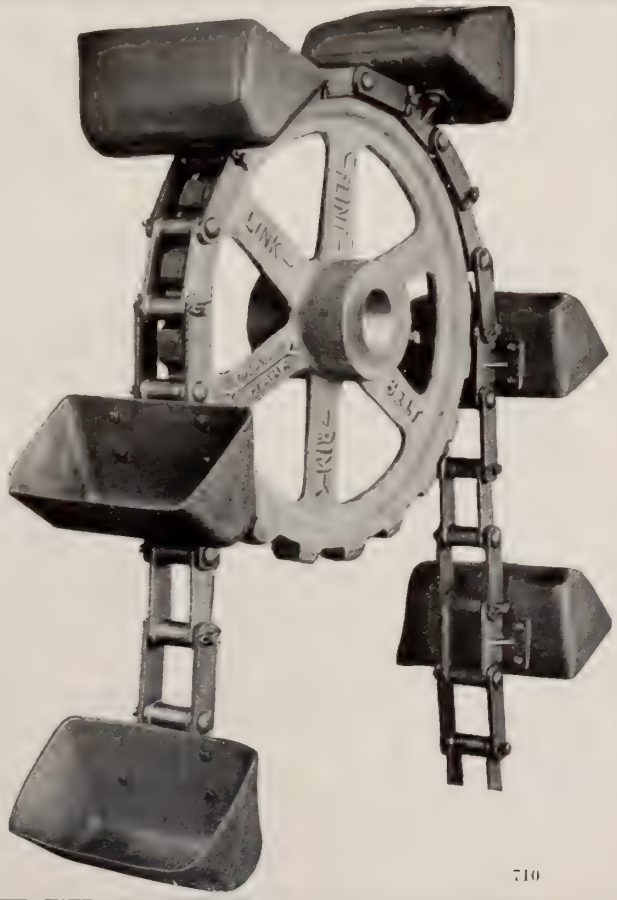
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710

New Electric Appliances

Superior Electrics, Limited, Pembroke, Ontario, Have Considerably Enlarged their Line

During the past year Superior Electrics, Limited, Pembroke, Ontario, added several new products to their line of electric appliances. Among these was a complete line of electric ranges in all the various popular models such as cabinet ranges, 3, 4 and 6 hole burners with ovens, warming closets, etc., and underslung oven styles, suitable for apartments where space is limited. The company purchased and installed a considerable amount of machinery and equipment suitable for manufacturing large hotel ranges as well as the ordinary domestic models.

A new line of patented electric water heaters, circulation type, was also developed by the company during 1921. This includes seven different sizes ranging from the 660 watt type, which can be attached to the ordinary lamp socket, up to a 3,000 watt model. The efficiency of these heaters is high as the electric heating element is surrounded on 5 out of 6 sides by water. The element may be inspected or renewed without interference with either the water connections or the electric supply current.

Another line developed and placed on the market during 1921 comprises 6 different sizes of electric soldering iron heaters. The company are looking forward to increased production during 1922.

Receiving Good Orders

Two Large Tanks Constructed by Horton Steel Works, Limited, Bridgeburg

Some good orders have recently been received by the Horton Steel Works, Limited, Bridgeburg, Ontario. In connection with the sprinkler system of the Canadian Libby-Owens Sheet Glass Company's new plant at Hamilton, Ontario, they have completed the installation of an elevated tank of 50,000 gallons capacity and 75 feet high.

Kitchener, Ontario, which is improving its waterworks system, has awarded the contract for construction and erection of a new standpipe to the Horton Steel Works. This tank will be 94 feet in diameter and 23 feet 3 inches high. Its capacity will be 1 000,000 Imperial gallons.

New Motorcycle

Crouse Hinds Company of Canada, Limited, Manufacturing New Product

A new type of motorcycle, the "Neracar," is being manufactured by the Crouse-Hinds Company of Canada, Limited, Toronto. It differs from the motorcycle in construction, being really a motor car on two wheels. Frame, chassis, method of spring suspension all follow the automobile type of construction, while its low operating cost and comparatively small size give it the economy and convenience of a motorcycle.

The Crouse-Hinds Company commenced the manufacture of these machines in December in their own plant. It is probable that sometime in the near future a new plant will be acquired for the exclusive manufacture of the "Neracar" and a new company formed under the name of the Neracar Company of Canada, Limited.

Within the past month the Fuller Brush Company, Limited, have installed new machinery and equipment in their plant at Hamilton, Ontario, for the manufacture of the Fuller Household Broom. This, the company state, is rapidly becoming one of the fastest sellers in their line, and about 4,000 square feet of floor space will be devoted to its manufacture. It is made by their own patented process and is an innovation, in that the filling material is fibre instead of corn.

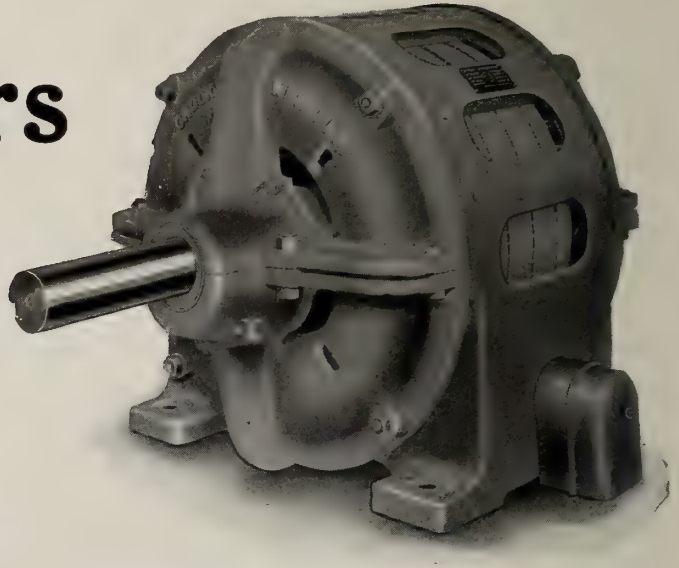
A new department has been added to the business of the Riverbank Manufacturing Company, Limited, New Glasgow, Nova Scotia. This is a modern plant for the manufacture of picks, mattocks, crow bars, stove shovels, etc. The company have just published a new catalogue of these articles which will be marketed under the trade name "Kingfisher" brand.

Motor dollars

No man has any to waste.

Therefore we build every Canadian Crocker-Wheeler motor as carefully as though the most hard-to-please motor expert in the world were going to buy it.

This heavy mill type Canadian Crocker-Wheeler motor, with cast welded Rotor, split end housings and journal boxes will give you exceptional service.



Canadian Crocker-Wheeler heavy mill type motor (M.Q.), 100 h.p., 550 volts, 3 phase, 60 cycles, 1200 r. p. m.

THE CANADIAN CROCKER-WHEELER COMPANY LIMITED

HEAD OFFICE AND WORKS: ST. CATHARINES ONT. MANUFACTURERS AND ELECTRICAL ENGINEERS DISTRICT OFFICES: TORONTO & MONTREAL

ALSO ALL BRANCHES OF Northern Electric Company LIMITED Montreal Halifax Ottawa Toronto London Winnipeg Regina Calgary Vancouver

ONTARIO WIND ENGINE & PUMP CO. LIMITED
TORONTO



TANKS are constructed by experts: they are built of the best tank grade stock, for all purposes.

Sprinkler Tanks
Dye Tanks
Mining Tanks
Pulp Thickening Tanks
Shallow Wood Tanks
Metal Pickling Tanks
Rectangular Tanks
Municipal Water Systems
Steel Towers

Illustrated Booklet will be mailed upon request.

Ontario Wind Engine & Pump Co.
Limited
ATLANTIC AVENUE :: TORONTO
Montreal Winnipeg Regina Calgary



Laying STANDARD Steel-Tape-Armored Cable across a Street.

A 50 Per Cent. Saving

in the cost of installing underground electric cables is worth considering these days. A cable which can be laid directly in a trench in the ground without conduits may solve the installation problem before you.

STANDARD Steel-Tape-Armored Cables

are designed for this class of service, and have in many cases shown a 50 per cent. saving in installation cost as compared with single runs of lead-covered cables laid in conduits. Write for Bulletin 680, which gives complete information.

Standard Underground Cable Co. of Canada, Limited
Branch Offices and Warehouses:
Montreal Toronto Hamilton Winnipeg Seattle

MAPLELEAF
Motor Trucks

Not the Money Involved, But the Soundness of the Investment

Is the first consideration of any business man in expending any funds. The soundness of the "Mapleleaf" as a truck investment is its chief recommendation.

We would like to prove it to you.

Mapleleaf Manufacturing Co., Limited
Head Office and Factory;
MONTREAL, - CANADA

BUTTERFIELD TAPS DIES AND REAMERS



True economy in the tool room means the purchase of tools of standard quality—tools that have a reputation for fast, accurate work and the longest service before regrinding. That's the reason why Butterfield Tools are the big favorities. The name on the shank is a guarantee that the business end of the tool is absolutely reliable.

Made in Canada by

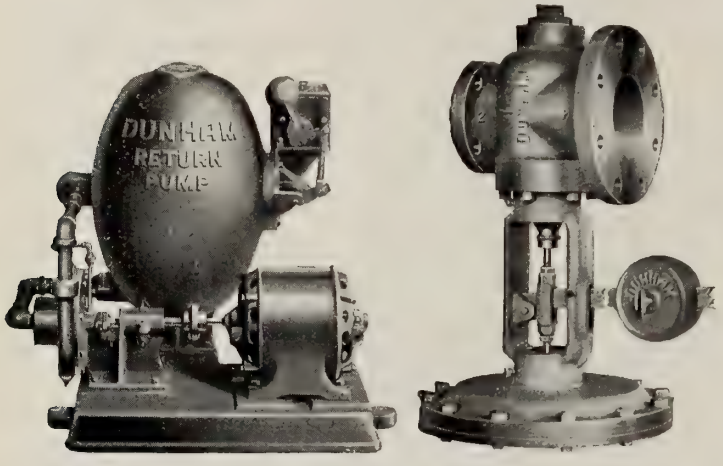
Butterfield & Co. Division
Union Twist Drill Co.
Rock Island - Quebec

New Canadian Products

Pumps and Valves

C. A. Dunham Company, Limited, Mading Two New Steam Heating Specialties

The C. A. Dunham Company, Limited, Toronto, who for a number of years have specialized in the manufacture of low pressure steam heating specialties, such as radiator traps, packless valves, etc., have placed on the market a line of automatic electric-driven condensation pump units and reducing pressure valves, both of which lines replace goods previously imported into Canada. Both lines have now been on the market a sufficient time to prove their usefulness in heating and power plants and a high-grade product is being turned out.



Two New Dunham Products

On the left is the Dunham Return Pump and on the right the Reducing Pressure Valve.

The Dunham return pump illustrated here is constructed to pump condensate automatically from heating systems or process work back to boiler, heater, hot well or other storage. The unit is provided with float switch control for stopping and starting the motor as the water empties from or accumulates in the receiver.

The line of valves is applicable to a wide rage of pressures in reducing the pressure of steam, air, water, etc. They will reduce initial pressure to the desired low pressure at one step.

Making Safety Gratings

McGregor & McIntyre, Limited, Introducing New Made-in-Canada Product

A new line of safety gratings is being turned out by McGregor & McIntyre, Limited, Toronto. They are made of ⅜ inch square steel cross bars, spaced ¾ of an inch apart, supported and braced at 4 inch intervals by "V" shaped longitudinal members, the ridges of which stand up very slightly above the general level of the grating surface, thereby affording a safe footing and perfect security against side-slipping.

The M. & M. gratings can also be arranged to lift out, to open on hinge pivots or to meet any special requirements. The manufacturers are prepared on request to submit drawings showing the adaptation of the gratings to any special purpose. Recently they made and shipped to the St. Maurice Lumber Company, Limited, Three Rivers, Quebec, about 4,000 square feet of the new product for installation in their new mill.

The Chesley Artificial Limb Company, Hantsport, Nova Scotia, are adding equipment to their plant for the manufacture of small leather wares. This will enable them to utilize leather from their major product which would otherwise be wasted and will provide employment for their leather workers in any dull season.

Is There An Imported Article You Would Like to Manufacture?

Some of the best sellers on the Canadian market are products of foreign make that YOU could profitably manufacture from Canadian materials—if you knew how they were made.

Many such trade-marked lines, while low in manufacturing cost command very high prices.

We are constantly requested to analyze such goods. In our reports we accurately state the component parts, furnish definite cost figures of materials and equipment required in their production and lay before you a complete process of manufacture, step by step.

Pick YOUR line and let us help you through one of these invaluable analyses.

MILTON HERSEY COMPANY, LIMITED

Industrial Chemists, Engineers and Inspectors

MONTREAL AND WINNIPEG

BRASS, BRONZE AND ALUMINUM ASTINGS

BY

MODERN **M**OULDING **M**ETHODS **C**UT **C**ASTING **C**OSTS

Our Method—Your Cost

Quantity production work a specialty.

Jobbing work taken care of promptly.

Send us your patterns for trial order.

All castings **Sand Blast Finish.**

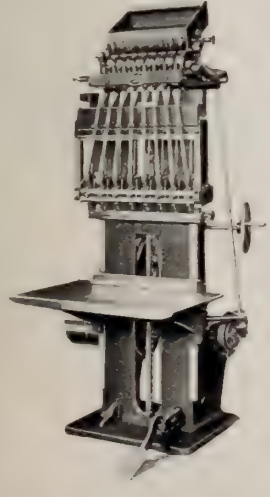
We stock Bronze Bushing Materials, all sizes—Cored and Solid. List sent on request.

SULLY BRASS FOUNDRY Ltd.

Brock Ave. and Bloor St. W.
TORONTO

YATES NAILING MACHINES

Built Strong for heavy continuous Service

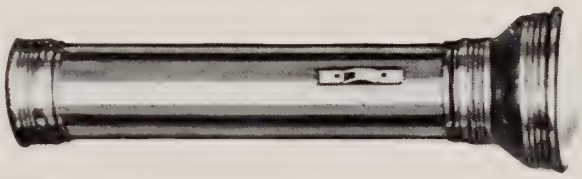


OPEN AND CLOSED BACK TYPES

BUILT IN DIFFERENT SIZES

P. B. Yates Machine Co. Ltd.

Hamilton, Canada



You Can't Set Fire to the House with an EVEREADY Flashlight

HOW many fires from matches, candles, oil lamps and lanterns would have been prevented by carrying an Eveready Flashlight!

Eveready has forever removed the fire hazard from the home. Eveready is flameless—cannot ignite anything. And in addition to its safety from fire, Eveready is the handiest portable light ever invented for use everywhere about the place.

You have a dozen uses a day for Eveready. Lights the way up and down stairs; down into the cellar; out to the stable, barn, woodshed, and other outbuildings.

Always keep your flashlights working with fresh Eveready Batteries

Eveready Flashlights and Batteries are for sale at Hardware, Electrical, Sporting Goods, Drug and Auto Accessory Shops; Garages; General Stores.

CANADIAN NATIONAL CARBON CO.
LIMITED

Toronto Montreal Winnipeg Vancouver

EVEREADY FLASHLIGHTS

"Be sure it's an Eveready"

New Canadian Product

L & N Company, Limited, St. Johns, Quebec, Making Paper Twines and Cords

The L. & N. Company, Limited, of St. Johns, Quebec, manufacturers of non-metallic flexible conduit, known under the trade names of "Insuladuct" and Loomduct, have recently commenced the manufacture of kraft paper twines and cords.

Paper cord is used extensively in the manufacture of flexible conduit and during the War the L. & N. Company, who were the largest users of the product in Canada, experienced great difficulty in obtaining supplies, owing to labour and transportation troubles. Up to the close of 1921 paper cord had been sold to Canadian manufacturers by the United States, but it will now be possible to buy this product in the home market.

Lumber Mill Fire

Damage Estimated at $500,000 Caused to Brunette Sawmills, Sapperton, B.C.

Damage estimated at $500,000 was caused by a fire at the Brunette Sawmills, Sapperton, British Columbia, on January 28th. The sawmill and the planing mill were completely destroyed but by attacking the conflagration from both land and water the sheds and the lumber piles were saved. The box factory had a narrow escape, but was not seriously damaged.

The fire was first detected near the boiler room when it was already well under way. Great efforts were necessary to keep it from spreading to the town of Sapperton, as the flames were fanned by a strong wind from the river.

Exhibition at Tokyo

Some particulars about great Peace Exposition to be held this Spring in Japan

The Peace Exposition at Tokyo, Japan, under the auspices of the Tokyo Provincial Government, will be held from March 10 to July 3. The purpose of the exhibition is to show the progress of Japanese industry and to promote international trade.

In response to inquiries received by the Canadian Pacific Railway in regard to booking passages and arranging for the shipment of exhibits, it is announced that the Exposition will consist of ten departments, the most important being the Industrial Department, the Food Department, and the Foreign Trade Department. In the Foreign Trade Department, the industries of China, the South Pacific islands and South America are to be represented. In the Foreign Department various foreign exhibits which are of great importance in the industrial development of Japan, will be shown. The expenditure on the exhibition is estimated at 6,000,000 yen, according to Mr. A. E. Bryan, Canadian Trade Commissioner at Yokohama.

The exhibition buildings will cover an area of 15 000 tsubo (1 tsubo=6x6 feet.) From this 1,500 tsubo, or about 54,000 square feet, have been set apart for foreign exhibitors. Besides this, foreign exhibitors will be allowed to build special exhibit buildings.

Ten per cent. of the exhibition space is to be devoted to foreign exhibits. The charge for space is 70 cents per square ft. but if foreign exhibitors wish special buildings of their own, no rent is charged.

Mr. Bryan is of the opinion that Canadian firms interested in the Japanese market, particularly on the Pacific coast, should participate in this exhibition, which he states is to be the most important that has ever been held in the Orient. There is a market in Japan of 60,000,000 people who, particularly when business conditions become more normal, will always be ready to purchase from Canada. The Dominion of Canada has already supplied to Japan large quantities of wood pulp, timber, and metals, as well as smaller quantities of dried fish and provisions.

Further information may be secured from the Department of Trade and Commerce, Ottawa, and will be at the service of Canadian firms interested on communicating with the Director, Commercial Intelligence Service, referring to file No. 27097.



Efficiency in Belt Performance

The one thing you want to feel certain about in your belt purchases these days—when so much depends on the ability to lower costs and maintain quality—is Efficiency in Belt Performance.

That "Efficiency" has been built into

DUNLOP

"GIBRALTAR REDSPECIAL"

through years of belt-making experience for every possible use to which a Transmission Belt could be put.

When you buy this Belt your interests are safeguarded from the very first moment it is installed.

That satisfaction alone is worth considerable, although you don't have to pay one cent more for this proven belt than one you are doubtful about.

Dunlop Tire & Rubber Goods Co., Limited

Head Office and Factories: TORONTO **Branches in the Leading Cities**

A FEW MONEL USES

VALVES
Seats
Rings
Guide Stems
Clappers
Wedges
Spindles
Dash Pots
Pistons

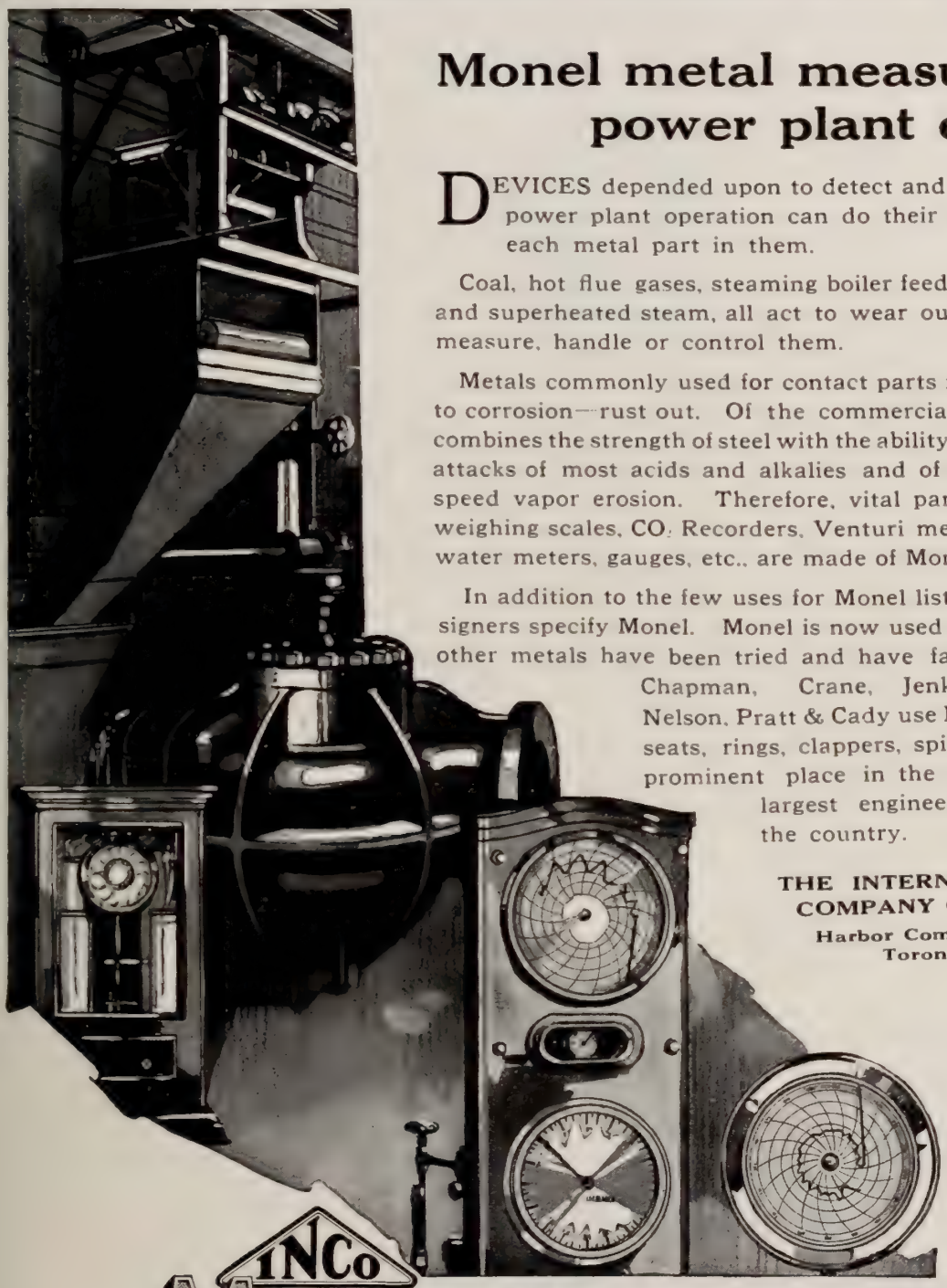
PUMPS
Pump Liners
Runners
Valve Seats
Trim
Hand Hole Covers
Plunger Rods
Stuffing Boxes
Plungers

METERS
Cylinders
Bushings
Valves
Valve Parts
Spindles
Screws
Gears
Wheels

GAS & OIL ENGINES
Valves
Ignition Chambers
Ignition Tubes
Fuel Filters
Scavenger Valves
TURBINES
Poppet Valve Parts
Blading

GAUGES
Pins
Pivots
Diaphragms
CONVEYING APPARATUS
Chains
Buckets
Hoppers

AIR COMPRESSORS
Valves
BLOWERS
FANS
Blading
THERMOMETERS
Bulbs
SPECIAL APPARATUS
Watchman Recorders
Watthour Recorders



Monel metal measures power plant efficiency

DEVICES depended upon to detect and "show up" inefficient power plant operation can do their work no better than each metal part in them.

Coal, hot flue gases, steaming boiler feed water, high pressure and superheated steam, all act to wear out the device used to measure, handle or control them.

Metals commonly used for contact parts in these devices yield to corrosion—rust out. Of the commercial metals, only Monel combines the strength of steel with the ability to stand up under the attacks of most acids and alkalies and of high heats and high speed vapor erosion. Therefore, vital parts of automatic coal weighing scales, CO_2 Recorders, Venturi meters, flow meters, hot water meters, gauges, etc., are made of Monel.

In addition to the few uses for Monel listed above, leading designers specify Monel. Monel is now used in many places where other metals have been tried and have failed. For instance, Chapman, Crane, Jenkins, Lunkenheimer, Nelson, Pratt & Cady use Monel for valve stems, seats, rings, clappers, spindles, etc. It has a prominent place in the specifications of the largest engineering organizations in the country.

THE INTERNATIONAL NICKEL COMPANY OF CANADA, LTD.
Harbor Commission Building
Toronto, Ontario

The name Monel identifies the natural nickel alloy—67% nickel, 28% copper and 5% other metals—produced by The International Nickel Company. Monel products include Monel blocks, Monel rods, Monel castings, Monel sheet, Monel wire, Monel strip stock, etc.

INCo Monel metal

THE INTERNATIONAL NICKEL COMPANY

INCo MONEL METAL INCo NICKEL

A Little Sermon on Safety

By F. J. McGUE
Superintendent of Industrial Services, Algoma Steel Corporation
(In the Sault Daily Star)

TO any man, who can see farther than the end of his nose, it is quite apparent that nothing more potently than safety work injects the human touch, or relation, into industry. The vital importance of this human touch, or relation, is realized by all thinking men who know that it is the abolition, or, at least, the weakening of this very human touch, which is the root-cause of whatever conflict there is today, between Capital and Labor, in the industrial world.

"Am I my brother's keeper"—is an age-old question, to which the employer gives affirmative reply through safety work and he cannot make said affirmative reply without admitting the premises—that is, without admitting that the employee is his brother; without admitting that he takes a brotherly interest in his employee, in the employee's wife and little ones. For, unsafe working conditions affect, not only the workingmen themselves, but especially their wives and little ones, who, possibly, are the greatest sufferers from industrial accidents and the effects of such accidents.

Workmen, noting the interest of the employer in their safety and welfare, are not slow to reciprocate.

Hence the better morale all around—resulting in a better spirit of co-operation in the performance of the common task, the attainment of the common objective; better morale on the part of the employer, himself, to whom the reputation of running an unsafe plant can never be an asset; better morale on the part of the men, on realizing that the employer takes a personal interest in their safety and welfare. These are the real, more or less inappreciable but, by far, the most weighty results accruing from safety work.

So much for the facts.

But, as the ethics of journalism demand that, from a statement of fact, or a series of facts, an editorial point out some conclusion—what lesson does the safety campaign in our plant embody in itself?

This necessitates a brief outline of the methods used in our campaign.

It was all a question of changing the mental attitude of everybody on the question of accidents—nothing more, nothing less. We, out at the plant, allowed a half dozen or so simple home truths, on personal responsibility, the non-necessity of accidents; on the human factor always and everywhere being, at bottom, the cause of any and all accidents—we allowed simple home truths to filter into, or to be hammered into, our minds; and, as Virgil used to tell us in our school days, "mind, and mind alone, controls matter."

Having altered our collective mental attitude on the question of the cause of accidents, we governed ourselves accordingly—and we are still governing our conduct accordingly; for, we believe that we can do much better in the matter of reducing accidents.

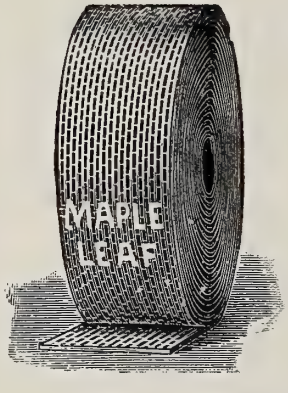
The lesson is that, no matter what problem it is—whether a world problem, an industrial problem, a business problem—the solution lies in the formation of a mental attitude. What is the end of all advertising, unless it be to create a mental attitude favorable to certain products or certain goods? What is salesmanship, if not an endeavor to influence the mental attitude of a prospective buyer? What is propaganda of any kind, whether religious, social or political, if not an effort to influence the mental attitude of the mass?

In fact everything in life is a question of mental attitude.

Steel Goods Catalogue

Catalogue Number 32 has been issued by the Steel Trough and Machine Company, Limited, Tweed, Ontario. This covers heavy sheet steel goods such as tanks and cisterns, troughs, pipes, lawn rollers, steel trucks, foundry ladles, etc. The leading standard lines made by the company are described in the catalogue, but they are prepared to make any articles similar to the goods listed and have special equipment for the manufacture of heavier goods than can be made by the local tinsmith.

DOMINION BELTING CO., LIMITED
HAMILTON, :: CANADA



Sole Manufacturers of the Celebrated

"Maple Leaf" Brand
Stitched Cotton Duck Belting

STRONG DURABLE ECONOMICAL TRUE RUNNING

Being thoroughly waterproof it is equally good for running in wet or dry places. As a main drive, "MAPLE LEAF" cannot be excelled, and for conveyors it is in great demand. :: A trial belt will convince you.

Write for Samples and Prices

"MAPLE LEAF" BELT DRESSING
The Best for All Kinds of Belts

Quebec Branch: 51 Duluth Building, Montreal

CRANE
OIL SEPARATORS



Illustration shows Horizontal Type, which is made in all sizes.

Vertical Type, not illustrated, in sizes 1½ to 12 inch inclusive.

CRANE
OIL SEPARATORS

HAVE LARGE AREAS AND AMPLE BAFFLE SURFACES, AFFORDING THE HIGHEST DEGREE OF EFFICIENCY WITH THE SLIGHTEST LOSS IN PRESSURE.

Be sure that your oil separator is properly drained.

Manufacturers of Valves, Fittings and Piping Equipment and Distributors of Pipe, Plumbing and Heating Supplies.

CRANE
LIMITED
HEAD OFFICE & WORKS
1280 ST. PATRICK STREET
MONTREAL

Branches and Warehouses:
HALIFAX, OTTAWA, TORONTO, WINNIPEG, REGINA, CALGARY, HAMILTON, VANCOUVER, LONDON,

Sales Offices:
QUEBEC, SHERBROOKE, ST. JOHN, VICTORIA.

CRANE-BENNETT
Limited
Head Office and Warehouse:
LONDON, ENGLAND.

Sales Offices:
MANCHESTER, BIRMINGHAM, LEEDS, GLASGOW.

32

Cotton Textile Industry

Dominion Bureau of Statistics Issues Preliminary Report on Operations during 1920

The Dominion Bureau of Statistics has issued a preliminary report covering the principal statistics of the cotton textile industry in Canada for the calendar year 1920. The total number of mills reporting was 31, of which 13 were located in Ontario, 13 in Quebec, 4 in New Brunswick and 1 in Nova Scotia. Following are some of the figures given in the report.

Number of mills	31
Capital investment	$76,413,703
Land, buildings and fixtures	$117,106,018
Machinery and tools	$ 25,314,735
Materials, stocks in process, etc.	$ 15,293,987
Cash and accounts	$ 18,698,963
Number of employees, male	9,573
Number of employees, female	8,052
Salaries and wages	$ 13,860,713
Fuel consumption, Canadian, value	$ 389,554
Fuel consumption, foreign, value	$ 886,563
Number of h. p. used	70,791
Miscellaneous expenses	$ 8,892,766
Cost of materials used	$ 53,402,723
Value of products	$ 92,490,002

Employees' Club Organized

Canada Cement Company, Limited, Erect Attractive Building at Brockville, Ontario

The Canada Cement Club recently organized at Belleville, Ont., once more makes evident the fact that modern business is interested in the welfare of employees as well as in the amount of work done by them. The Club's new home has just recently been completed. Naturally it is largely of concrete and is a good example of an attractive and comfortable building.

On the main floor is a large lounge room with mission furniture, piano, and mammoth pire place. The pool and billiard rooms adjoin this living room on one side and the dining room and kitchen are on the other side.

Twenty-five bed rooms are available on the second floor. From the balcony there is an excellent view of Prince Edward Island and the Bay of Quinte with its fishing boats.

Dances are held monthly and the Club House is at all times the center of the social life of the employees. A skating rink has also been built for the home games of the Canada Cement Hockey Club.

H. J. McAdie

Resigns Position as Sales Manager for A. Ramsay & Son Company, to Open Office in Montreal

H. J. McAdie has resigned from his position as sales manager for A. Ramsay & Son Company, Montreal, to open his own office as direct agent and exporter. He is representing a number of English, United States and Canadian firms whose products are used by the paint, varnish, rubber, ink, paper and kindred industries.

Mr. McAdie has had twenty years' experience in the paint and varnish business, for eleven of which he has been connected with A. Ramsay & Son Company. His new address is Room 816 Power Building, 83 Craig Street West, Montreal.

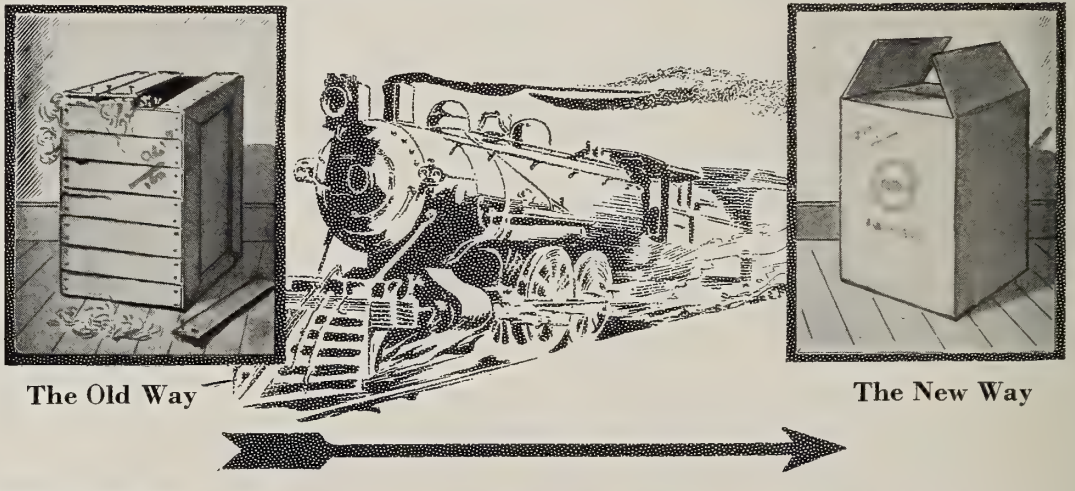
Issue New Bulletin

The Canadian Ingersoll-Rand Company, Limited, 260 St. James St., Montreal, have issued a new bulletin describing and illustrating the Price-Rathbun stationary oil engines. A copy of this bulletin will be sent to any interested reader of INDUSTRIAL CANADA on request.

Not Buying Property

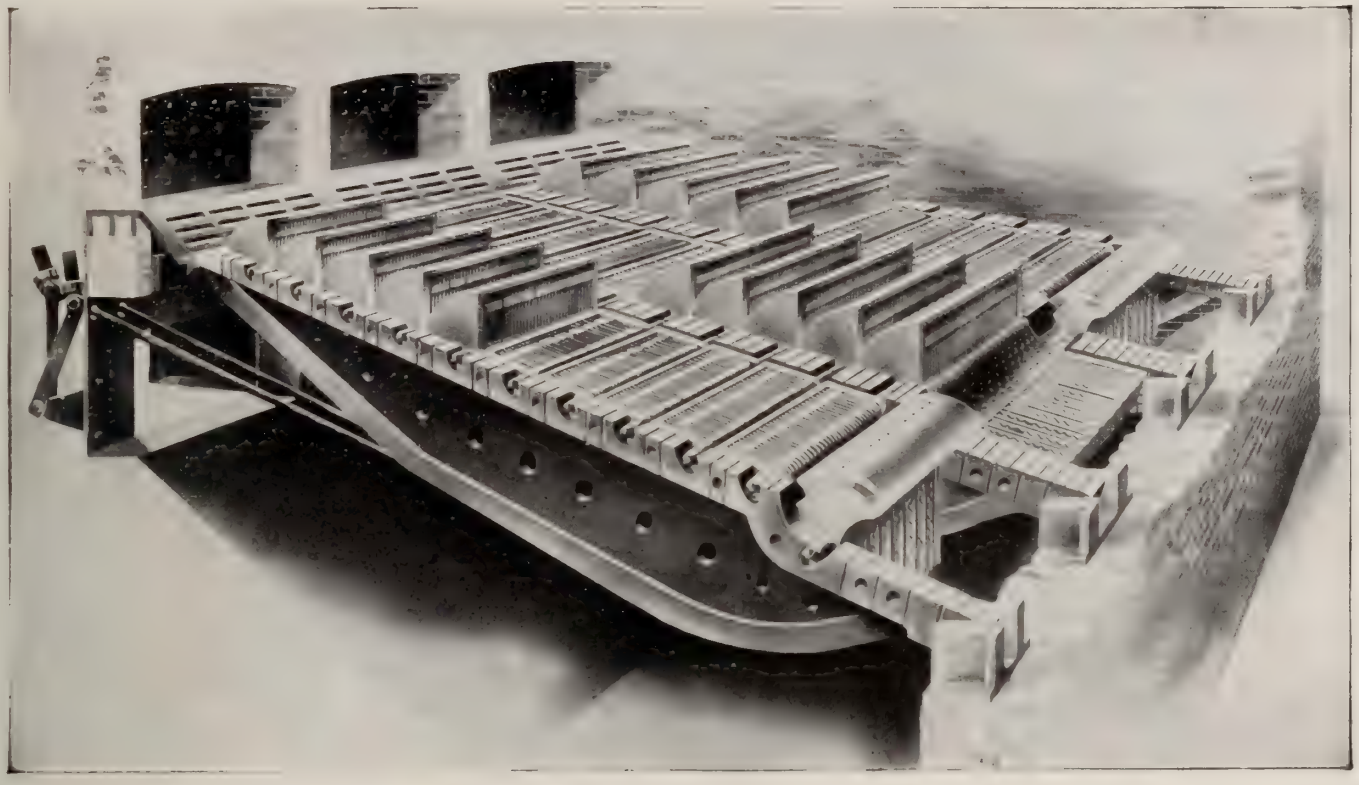
With reference to a report in a Toronto paper, stating that the Canadian Car & Foundry Company, Limited, were contemplating establishing a plant in Toronto, W. F. Angus, vice-president of the company, writes: "I wish to advise that these reports are somewhat erroneous, and that we are not in the market for property in Toronto at the present time."

H. & D. Corrugated and Solid Fibre Board



CONTAINERS will save on your transportation charges, save your floor space, cut down packing expenses, and give you positive protection against loss from damage and pilfering. Write for prices and samples.

The Hinde & Dauch Paper Co. of Canada, Limited
TORONTO, CANADA



150% to 200% Boiler Ratings with Files Hand Stokers

Maximum ratings are being easily and economically obtained with Files Stokers—not for one day or two days, but continuously. Here are but a few reasons why many power plants, using Files Stokers, are constantly enjoying the lowest operating expenses, the greatest steam pressures and have "jacked" their boiler capacity as high as 200%—safely and inexpensively.

1—Files Stokers insure complete and smokeless combustion.

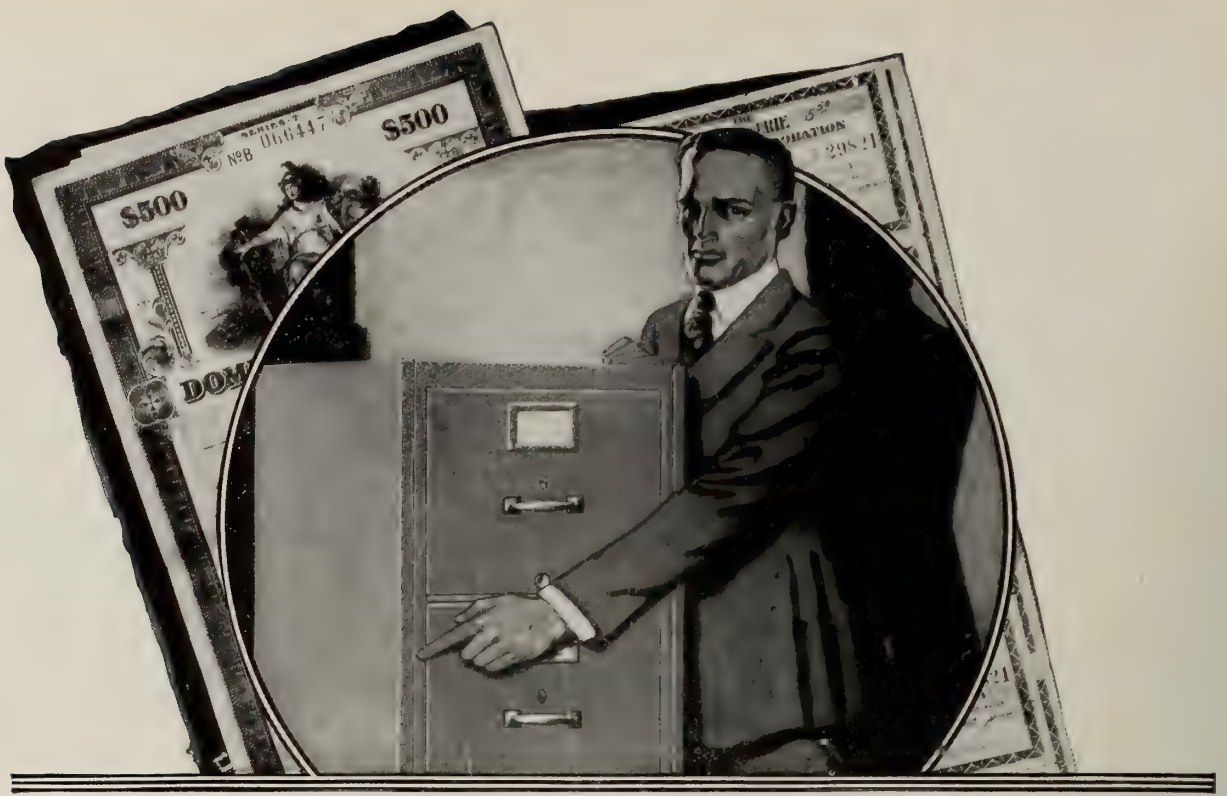
2—They maintain at all times the correct depth of fuel—clean and live fires.

3—Air is constantly circulated and evenly distributed to all parts of the fire.

4—All cleaning operations are constantly performed behind closed doors; there is no excessive inrush of cold air and resultant decrease in pressure at any time.

The Waterous Engine Works Company, Ltd.

Brantford, Ontario



Make your money buy Safety as well as Service

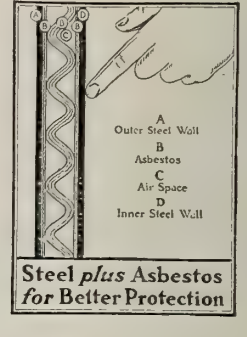
Wise investors put their money into Government Bonds or gilt-edged securities. Why? Because the risk is lowered. The "margin of safety" is increased.

Why not buy your filing cabinets on this basis. Make your money buy safety as well as service.

FIRE-WALL FILING CABINETS
Steel-*plus*-Asbestos

"Fire-Wall" means better protection—an increased "margin of safety" for your business records. "Fire-Wall" cabinets are built to give you more safety. A curtain of asbestos, between two sturdy walls of steel, stands between your valuable records and the fire that may bring misfortune upon you. Consider safety when buying filing cabinets. "Fire-Walls" are an investment in better protection for your business records.

Drop a card in the mail to-day for a copy of "Protection for Your Business Records." Address nearest service store or Home Office.



Steel *plus* Asbestos *for* Better Protection

The "Office Specialty" Direct Name Filing System in "Fire-Wall" Filing Cabinets is the ideal combination for modern business records.

THE OFFICE SPECIALTY MFG. CO. LIMITED
Home Office NEWMARKET Canada

Filing Equipment Stores at:

Toronto Montreal Ottawa Halifax Hamilton Winnipeg
Regina Edmonton Calgary Vancouver

1008

OFFICE SPECIALTY

FIRE-WALL FILING CABINETS

Steel *plus* Asbestos — *for* Better Protection

Copyright, 1921. The Office Specialty Mfg. Co. Limited

OFFICE AND FINANCE

Handling Percentages Recklessly

By D. M. McLean

SOME years ago the writer was one of a group discussing the plans of a manufacturing company which had been in operation but a few months. Up to that time, prices for the product had been fixed largely by estimate and good judgment rather than on a cost basis. Inventory, however, had been taken, a balance sheet prepared, and from the figures thus made available, the company's accountant had worked out the burden percentages for the two main departments into which the business was divided. These percentage rates were to be applied on the direct labor in estimating and working up selling prices. The principal salesman was present, and on hearing the burden percentage rates mentioned, he at once took exception to them, stating that the Blank Co. of Blankville were not using any such figures as we had named, and that the figures we proposed to adopt would put us out of the running in competition.

Inquiry brought out the fact that the Blank Co. were using 40 and 10 per cent., which was explained as 40 per cent. on labor and 10 per cent. on material. This was a standard method of estimating in the plumbing trade and some others in the olden days, in certain sections of the country, but was manifestly out of place in our manufacturing industry.

In the end we resolved to stand by the findings of the accountant, although the salesman in question still had many misgivings. At any rate, the Blank Co., breathed its last two or three years later, and our accountant had the satisfaction of learning that the rates he had arrived at by independent investigation were practically the same as those in use by the same trade in the Central and New England States and by the principal Canadian manufacturers of the same class, and that those firms which had been using lower rates, based on old practice, had resolved to come into line, and adopt our methods and rates.

A reckless use of percentages was evident and almost amusing when a firm closely allied with us but located in a distant city, resolved to adopt our burden percentage rates on their own estimates and cost sheets, although their conditions were very different from ours, both as to departments and products. These works have since passed into other hands, and the newcomers, with unpleasant results, for a time applied the burden rates of their original plant, engaged largely in repetition work, to the figures of the newly acquired plant which was engaged in building special machinery with very little repetition work.

The careless use of percentages is not without its humorous side, as for example, a journal quoting from the report of an investigator states that he found that the employees of the Erewhon works were paid 106 per cent. less than the rate for the same work at the Blankville plant. This is one of those statements which are important if true, but probably not true" Assuming that the average daily wage at the Blankville plant is $4.00, it follows that the workman at the Erewhon plant not only receives no wages for his day's work but goes in debt to his employers to the extent of 24 cents per day. It is impossible to tell what the investigator really wished to convey, if he has been correctly quoted.

In a hotel dining room, a man, apparently of intelligence and ability, imparted to a companion quite audibly his belief that blood would flow in the streets of Blankville in a few weeks if the labor situation "were not taken care of." A 50-hour week was then being worked in many of the industries. He went on to say that since his company had cut the working day from ten to eight hours in their jewellery factory, their production had increased 40 per cent., and he cited this as a striking example of the benefits of the eight hour day, and as, in general, proving the case for the shortened working period. This was quite impressive at the moment, but did not stand analysis. Furthermore, it reflects rather unfavorably on the workers, who must have been "swinging the lead" pretty thoroughly before the change took plance. If we call 10 hours production 100 units, and the production rose to 140 units in 8 hours, it will be seen that the hourly production was increased from 10 per hour to 17.5 per hour or 75 per cent. This is incredible, unless important improvements in manufacturing methods were made at the same time, and as the speaker proved to be the production man of the plant in question, it seems likely he would have claimed credit for a share of the results instead of generously ascribing them all to the adoption of the eight hour day.

Profits are Reduced

Canadian Car & Foundry Company, Limited, Statement Reflects Industrial Depression

The annual statement of the Canadian Car & Foundry Company reflects in reduced profits the state of the industry and the trying conditions during the past year. The reduction, however, is not as great as might have been expected.

Combined profits for the year amounted to $1,188,853, as compared with $1,515,712 a year ago. Provision for depreciation amounted to $365,800, as against $516.800, leaving profits before charging interest of $823,053, compared with $998,912 in the previous year. This year there was deducted for interest on bonds outstanding $456,382, against $477.025, while other interest met this year is $180,153, compared with nothing in the previous year and the interest on negotiable scrip is $78.914, making a total of $715.449, as against $459.515 a year ago.

These left net profits for the fiscal year of $107,603, compared with $539.397. The profits, added to the total surplus carried forward, made the total amount available for distribution $6,351,207. From this there was set aside a reserve for shrinkage in inventory values of $800,000, and provision for Government taxes and general purposes $200,000. In addition there were deducted dividends paid of 5¼ per cent. on preferred stock, $393,750, and dividend scrip 22¾ per cent. on preferred stock $1.706.250, making total deductions of $3,100.000, and leaving a surplus to be carried forward into the new year of $3.251,207.

The company's current assets are set at $8,360.807, as against $20.720.183 a year ago, and this reduction is almost entirely due to a large decrease in inventories which are set at $4 646,501, as against $14.788.960. Accounts and bills receivable are set at $2.007.389, as against $4 105.888, while the company's holdings of bonds and other securities show an increase of $1,494 269, as against $1.339.620. Current liabilities show an important reduction, being $1.585.073, as against $12.209.602, and this reduction has been secured by the wiping out of bank loans which a year ago were set at $5.250,000, and the reduction of accounts payable and payrolls from $6.714,230 to $1.438.825.

The company's reserves are shown at a total of $5,377.246, as against $5.032.922 a year ago.

Provincial Paper Mills

Profits for Past Year Lower, but Company Strengthen Cash Position

Although a decline in demand for pulp and paper products lowered the profits of Provincial Paper Mills, Limited, for the past year a substantial surplus of earnings was shown by the financial statement and a material strengthening of the cash position. Profits of $728,774 for 1921 compare with $1,225.775 for the banner year of 1920. After deducting all expenses and applying the sum of $210 000 to the reserve for depreciation, $119,000 in preferred and $245,000 in common stock dividends, there was a surplus of $153,844 as compared with $663.403 at the close of the previous year.

Assets show a slight increase in value and stand at $7,611.568 as compared with $7.565,617. Real estate, equipment, etc., are valued at $5.306.408, as against $4.952,681. Current assets at $1.443,778 compare with current liabilities of $476.159. Accounts

Bank of Montreal

Established over 100 Years

Capital Paid up - -	**$22,000,000**
Rest - - -	**$22,000,000**
Undivided Profits -	**$1,501,646**
Total Assets - -	**$517,403,162**

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MEXICO CITY

UNITED STATES: New York, Chicago, Spokane, San Francisco —British American Bank (Owned and controlled by the Bank of Montreal)

WEST INDIES, BRITISH GUIANA and WEST AFRICA—The Colonial Bank (in which an interest is owned by the Bank of Montreal)

Exchange Business

WE are in the market for the purchase or sale of Bills of Exchange and through our branch in London, England and our New York Agency, we are in a position to transact business of this nature at the most favorable rates. 607

The Canadian Bank of Commerce

Capital Paid up $15,000,000
Reserve Fund $15,000.000

receivable total $663,680, as against accounts payable of $393,326. The inventory at $809,826 has been taken, it is understood, at December 31 cost prices. The reserve for depreciation now stands at $593,161, as against $443,161 and the balance at profit and loss at $787,247, as compared with $633,403.

The Dominion Bank

Annual Statement Shows Successful Year and Strong Position in Assets

A striking feature of the annual statement of the Dominion Bank just issued is the strength indicated in respect to the institution's assets. In immediately available assets the Bank has strengthened its holdings of Dominion and Provincial Government Bonds during the year from $5,106,158. to $13,371,201, an increase of $8.265,043. Total immediately available assets stand at $60,109,667, which bears the substantial proportion of more than 51 per cent. to its liabilities to the public. Cash assets alone at $30,421,750 are equal to about 26 per cent. of the liabilities to the public. The bank's total assets have a value of $131,335,942.

Net profits amounted to $1,016,262. In view of prevailing conditions this is a decidedly favourable showing, for although the net profits were less by $1/2,000 than those of 1920, it is remembered that those for that year were the largest in the bank's history.

Shareholders received their usual dividend of 12 per cent. and bonus of 1 per cent. for which distribution $780,000 was required. The amount carried forward to profit and loss account was $715,480. The reserve fund stands at $7.000,000 or $1,000,000 in excess of paid up capital.

Although interest bearing deposits at $80,786,284, are less by $4,103,155 than they were at the end of 1920, they are, on the other hand, in excess of those of two years ago by $6,500,000. Deposits not bearing interest stand at $18,018,016, a decrease of $2,033,800. Total deposits are $98.804,300.

In common with other Banks, the Dominion Bank has experienced some decrease in business as a result of the country's general contraction in trade. The decrease, however, is slight. Current loans, for example declined by only $2,506.043, while the aggregate decrease for all the Canadian banks according to the figures for the twelve months ended November was $148,000,000.

Canada Cement Company

Annual Statement for Year Ended December 31st Shows Increased Earnings

Net earnings of the Canada Cement Company, Limited, for the year ended December 31st, stand at $1,260,069 as compared with $1,019,112 for 1920, an increase of $240,957 or slightly over 21 per cent. The year's income from operation and investments totalled $2,636.460, as compared with $2,362,742 for 1920. Deductions for depreciation, bond interest, insurance and reserves total $1,371 391. Further deductions for preferred and common dividends, unchanged from the previous year, totalled $1,545,000.

In order to meet the common dividends it was necessary to draw upon surplus to the extent of $284,930, as compared with a similar draught a year ago of $525.887. The surplus balance accordingly is $614.040 as against $898,970 at the close of 1920.

Investments show a reduction of $396,689 to $2,348,441. The company's position as to working capital is as follows:—Current assets, $3,849,884; current liabilities, $2,107,384; working capital, $1,742,500. During the year the company's bond issue was reduced by redemptions to the amount of $273.180, reducing those outstanding to $6,073,080. Reserves are increased by $101,143 to $2,388,278.

Dominion Glass Company

Slight Reduction in Net Profits but Working Capital Position Shows Improvement

A slight reduction is shown in the net profits of the Dominion Glass Company, Limited, for the year ended September 30th, last. They are shown by the recently issued annual statement as $699,599 as compared with $757,989 for the previous year, a decrease of slightly over 7 per cent.

After the deduction of bond interest and sinking fund charges and interest on the preferred and common stock, there remained $92,599 for addition to surplus, as compared with $235.989 for the

previous year. This reduction is partly due to the fact that dividends on the common were increased at the last quarter of the previous year, and this year called for a total disbursement of $255,000, as against $170,000 for the previous 12 months.

The amount available for distribution on the common stock is thus shown to be $347,599, or 8.17 per cent, on the common, as compared with 9.55 per cent. a year ago, and 6.58 per cent. in 1919.

The year's surplus amounts to $92 599, which brings the total balance of profit and loss to $818,144.

The working capital position of the company shows marked improvement when compared with the figures of a year ago. Current assets are shown as at $2,430,959, and the current liabilities as at $334,549, leaving a balance of assets of $1,896,410, which compares with $1,458,909 at the end of the previous year. This is due to a large decrease in liabilities, prominent among which is a reduction of $302,372 in the accounts and bills payable, which are brought down to $282,017. Payrolls, taxes and other accrued charges are also reduced by $211,380 to $143,280.

Among the assets inventories are increased by $44,954 to $1,096,313; accounts receivable are reduced by $332,949 to $964,930, while cash is increased by $214,929 to $307,533. An outstanding feature of the report is the reduction of the company's investments from $220,880 to $24,844. The company's real estate, equipment, etc., is set at $4,826,054, as against $4,720,173 a year ago. General reserves, these for depreciation and for bond redemption, are increased by $334,973 to $2,189,278.

Maintained Strong Position

British American Oil Company, Limited, Find Past Year's Business Fairly Good

At the close of the British-American Oil Company's annual meeting on February 8th, President S. R. Parsons issued a statement outlining the company's position. Business in the Western Provinces during 1921 had been somewhat disappointing owing to special conditions prevailing there, but elsewhere in Canada, except for the quiet times affecting manufacturers generally and curtailing their ability to purchase the usual supplies of lubricating and fuel oils, it had been fairly good. The company, he said, had no bonded or bank indebtedness, and had discounted all purchases of supplies wherever possible.

Dividends have been maintained at the rate of 8 per cent. per annum and shareholders are now paid in United States funds. Any profits outside of dividends, President Parsons added, are used in necessary expansions to the business. There is thus created a reserve which adds to the value of the shares.

It is hoped that the quest for crude petroleum now being carried on in Western Canada by a number of companies may be promising enough to warrant before long the British American commencing drilling operations on some of their leases

Mr. Parsons explained that it had not been the practice to give out the financial statement, as, up to date, the company had not offered any of their capital stock to the public. What limited stock was on the market had come through the purchase by the British American of a Western corporation.

Statement Shows Deficit

Bad Kraft Paper Market Causes Loss to Wayagamack Pulp & Paper Company

A loss of $156.712 on operations during the year ended November 30th last is shown by the statement of the Wayagamack Pulp & Paper Company, Limited. The market for kraft paper during the year was bad there being a greatly reduced demand and lowered prices.

Inventories of pulpwood, logs and lumber, which cost the company high prices, have been written down to present day values. Total current assets have been reduced by $877.869, to $3.567 753. Total inventories declined by $355 477 to $2 569.605. Owing to the fact that the left-over stock of pulpwood, logs, etc, was heavy, the logging expenses for the season are written at $228 300 as against $531.667 a year ago. The company's investments, including bonds acquired for sinking fund purposes at cost, are set at $23.77?, as against $142 268 in the previous statement. An increase of $970,418 to $4.633.479 is shown in the stated value of buildings, plant, etc., these including the completion of a large addition to the mill and the final installing of two new machines.

A Message to Canadians

ONLY by increasing the sale of Canadian commodities can we avoid increasing our foreign indebtedness. Never, even in war time, was it so essential to increase our exports.

A DUTY falls on manufacturers to produce articles of a quality and price that will compare favorably with foreign makes, and on our agricultural interests to increase production.

THE ROYAL BANK OF CANADA

Total Resources $500,000,000

Foreign Banking Service at "the Pulse of the West"

The Union Bank of Canada established a branch of its Foreign Department at Head Office Winnipeg, because of this city's position as the great commercial centre for East and West.

This location and private wire connections between branches in New York, Montreal, Toronto, Winnipeg and connections with Vancouver enable us to keep closely in touch with conditions in Canada and abroad.

Through continual operations in the exchange markets of Canada, the United States, Great Britain and world centres, we are able at all times to handle international exchange at closest possible rates.

Union Bank of Canada

Foreign Exchange

Through the close connection of our British and Foreign Department with our agencies abroad, this Bank has particularly advantageous arrangements for the buying and selling of drafts, and is able to give the closest possible rates on all foreign Exchange.

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IMPERIAL BANK
· OF CANADA ·

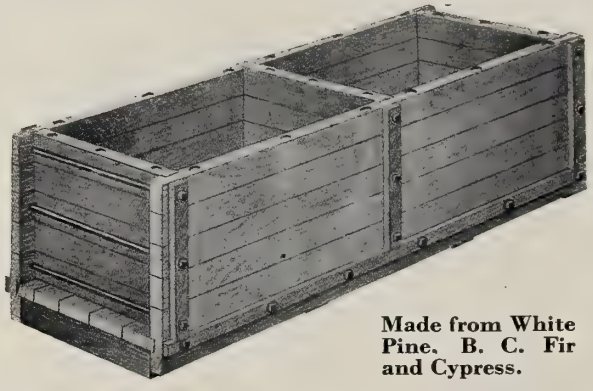
Capital Paid Up $7,000,000 **Reserve Fund $7,500,000**

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Much Better Year

Woods Manufacturing Company, Limited, Change Operating Deficit to Profit

For the year 1921 the Woods Manufacturing Company, Limited, showed an operating profit of $160,912, which compares with a loss of $412,324 in 1920. The company's achievement therefore was better than in the previous year by $573,236. Before paying dividends a balance of $71,018 was shown as against a deficit in 1920 of $546,736. Preferred dividends took $108,255 and common $137,488 making the deficit for the year $174,725, against $869,916 before. The working capital account of the company was almost as strong as a year ago, standing at $1,179,735 against $1,354.520

New Specifications

List of Publications of the British Engineering Standards Association Contains New Titles

R. J. Durley, secretary of the Canadian Engineering Standard's Association, Ottawa, states that he has received the November, 1921, issue of the list of specifications and report of the British Engineering Standards Association. The most recent work of the latter Association deals with:—

Condenser Tubes and Fittings for Marine Condensers;
Creosote for preservation of timber;
Wood Poles for Telegraph and Telephone Lines;
Terms and definitions for Automatic Telephone Systems;
Benzol for Motor Fuel;
Tungsten Electric Lamps;
Metallic Resistance Materials for Electrical Purposes;
Switches and Circuit breakers for pressures not exceeding 660 volts;
Tramway Tires;
Soldering Sockets for Electric Cables;
Electrical pressures for new systems of installations.

An important revision of the British Specification for Portland Cement has also been issued.

A number of the most important specifications and reports have been issued in French, Italian, Spanish and Portuguese translation.

Copies of any of the specifications can be obtained through Mr. Durley's office, at 25 cents per copy.

Annual Report Published

Board of Trade of St. John, New Brunswick, Reviews Work Done During Past Year

The annual report for 1921 of the Board of Trade of St. John, New Brunswick, has been published in booklet form. In a foreword to the report are set forth the important objectives which this body has before it. These concern chiefly the development of the port in order to realize fully its great potentialities. The board is in favor of a form of national control that will bring about this development, secure a unification of all water areas associated with the port and provide a more uniform system of management and control for piers and terminals, thus leading up to larger equipment and greater efficiency. During the past year the Board of Trade has accomplished a great deal of work along these and other lines, and the record will be of interest to all who know the city.

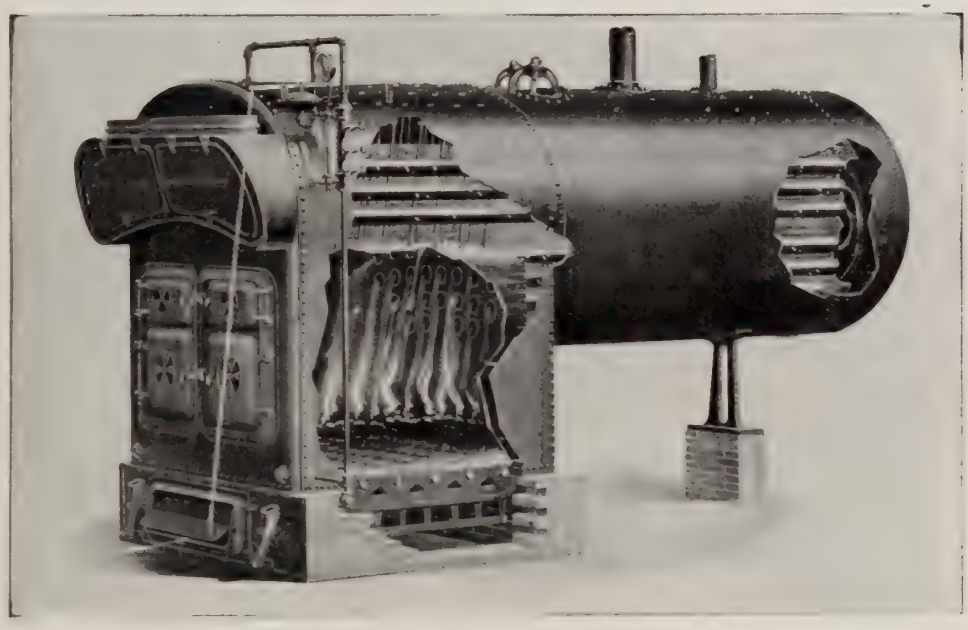
Mexican Conditions

Canadian Bank of Commerce Publish Useful Suggestions for Canadian Exporters to Mexico

As a supplement to their monthly commercial letter the Canadian Bank of Commerce have published an artic'e entitled "Mexico and the Canadian Exporter," by T. S. Leitch, manager of the Mexico City branch of the bank. It is a very clear analysis of the factors which govern trade in that country and the author gives several valuable suggestions to Canadian exporters. In his opinion, Canadian manufacturers, who are considering Mexico as a field for possible trade, should give special attention to the following articles: paper and pulp, lumber, manufactured wooden articles; canned salmon and codfish of first class quality; canned fruits and vegetables; wheat; soap, drugs and chemicals; and machinery in general.

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Book Reviews

The Trend of Industry

Industrial Ideals by Victor Gollancz. Toronto: Humphrey Milford. Oxford University Press.

This book, 64 pp., is a recent addition to "The World of Today" series, brought out under the editorship of Mr. Victor Gollancz. The series covers a wide field; international relations, finance, industry, education, politics and government. Each book is written by an authority and the aim of the author is to present in a concise form the most modern thought on the subject in hand. In the introduction to the book on "Industrial Ideals", the author states that "the book has been written with the aim of presenting in a connected form the main features of the outstanding schemes for industrial construction now before the public, together with the reasons for which they are advocated. Broad methods of dealing with the industrial situation as a whole have alone been considered; thus, while some attention has been given to profit-sharing (which, in alliance with cognate measures is felt by not a few to be generally applicable to our present difficulties) no mention has been made of particular proposals for the reorganization of particular industries".

Mr. Gollancz traces the changes in industrial conditions and the general attitude towards industry during the last century and then explains such proposals as state socialism, syndicalism, guild socialism, the soviet system, industrial peace and profit-sharing. It is interesting to note that in the nineteenth century Disraeli felt that the solution to the industrial problems of his day was not so much a body of concrete proposals as an attitude of mind: "just as the true solution of the problems of government was felt to consist in the training up of a wise, strong and humane body of governors who would carry out with justice and unselfishness the function with which they were entrusted, so the industrial problem would be solved only when the employers and landlords understood that they owed a duty to the men who were in their charge."

The sketch of the soviet system which Mr. Gollancz says is now in actual operation in Russia is one of the most interesting chapters of the book. "The Moscow Soviet, which meets weekly and which is both local authority for Moscow and one of the units from which the Central Authority is built up, consists of 12,000 members, who are delegates sent by various groups. Of these groups, the Moscow branches of the various Professional Alliances are the most important. There is also a delegation from each of the wards of the city to represent the interests of the citizens as residents of a particular district, of the political parties in Moscow and of the Trades Council. Other interests are also represented. Thus the Chinese residents of Moscow (of which there are about a thousand) elect one member to go to the weekly meetings. The Soviets of Moscow and all other towns then send delegates to the All-Russian Congress of Soviets, which meets at least once in six months. The All-Russian Congress appoints the Central Executive Committee which is in constant session and corresponds to the British Parliament. The Central Executive Committee in theory appoints the Commissionaries of the People, or, as we should phrase it, the Cabinet."

The author is "fairly certain that the Soviet structure will persist in some form or other under Socialism of the most developed kind in Russia—in other words there will be a centralized state as the final authority in that Society deriving its power through intermediate bodies from the people organized in various groups according to profession, party and other interests."

Although various schemes for reform are presented in the book, the main argument seems to be between socialism and capitalism. No conclusions are arrived at and at the end of the book the reader is left to decide for himself the following questions: in the first place, is it a fact that freedom cannot be a reality under capitalism; and if so, would it be either equally or more unreal under socialism? Secondly, what society embodies the higher ideal—a capital society, in which the direct motive for production is private profit or a socialist society in which the direct motive is public service?



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FOR HIGH SPEED FOR HEAVY PRESSURE

Will give satisfactory results in the MOST Troublesome Bearings

It is the "TEST" that proves the "VALUE" of anything, everything depends on "QUALITY"

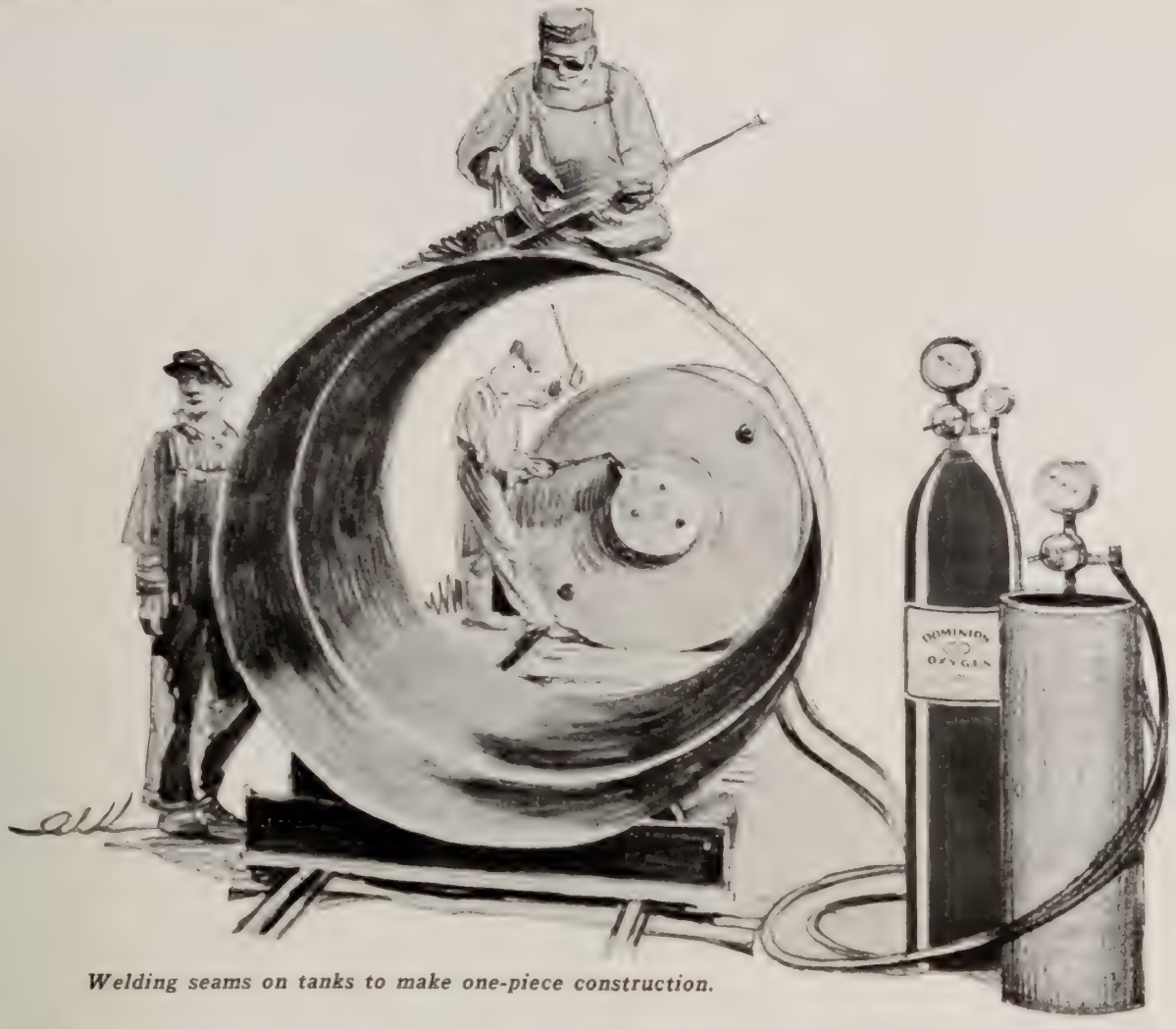
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Welding seams on tanks to make one-piece construction.

Dominion Oxygen is Organized for Service

TO keep pace with the rapidly increasing number of users of Dominion Oxygen and to fill their orders the same day as received, six perfectly equipped Plants and Distributing Stations have been located at strategic manufacturing and shipping centres.

The policy of Dominion Oxygen Company, Limited, to supply only pure oxygen in light weight, conveniently handled cylinders of the newest and most improved type and to make prompt shipments by the shortest route, will be maintained by the addition of more plants and distributing stations.

The six units now in operation will be increased from time to time, not only to keep pace with, but to anticipate the demand for oxygen service.

Be Sure To Get Our Price First. Get in touch with our nearest Plant or Distributing Station today and let us quote you—you owe it to yourself to get this better service.

The chain of Dominion Oxygen Plants and Distributing Stations now includes the important cities of Montreal, Toronto, Hamilton, Welland, Merritton and Windsor. Send your order to the nearest Distributing Station today for a sample cylinder, which will be shipped immediately.

A trial of Dominion Oxygen will make you a regular user, because you will both save money and get better service.

DOMINION OXYGEN COMPANY, LIMITED

Hillcrest Park, Toronto

Montreal Hamilton Merritton Welland Windsor

In Quebec City, order from our warehouse at Grant and Defosses Streets.

J 25

Thirdly, is or is not human nature such that reliance on the motive of public service (whether absolute or combined with an appeal in a modified form to the individual's material interest) would result in slackness and widespread poverty?

While the book is written mainly from the viewpoint of British industry, the questions discussed are international in scope and should prove good reading for those interested in the future of Canadian industry.

—M. KERRUISH.

A Book on World Trade

The International Directory of Leaders in World Trade. Published by American Bureau of Trade Extension, Inc., Washington, D. C. Price: $10.00.

This useful book is different in arrangement from the ordinary trade directories and supplies information on many subjects usually lacking in other books. For instance, one side of the page is devoted to a description of a country, its climate, exports, imports, population, etc., while the other side in parallel columns lists the exporters and importers, merchants, commission houses, steamship lines and banks in the countries so described. At the beginning of the geographical sections a page or two of general information, showing chambers of commerce, postal rates, legal holidays, etc., is given, thus providing in small space an ingenious arrangement for the benefit of users. A list of selected attorneys clearly set out is another striking feature of the book.

The following extracts from the foreword by John Barrett, former Director of the Pan American Union, epitomizes the characteristics of the book:

"The exporter and importer, the manufacturer of finished products, and the seller of raw supplies, the banker, the financial agent, the shipping man, and the salesman, all wish to feel confident that they are consulting an authoritative work. For that reason, the writer of this foreword and other experts submitted many suggestions and made numerous corrections in the work before they felt this foreword could be authorized.

"The book, in its first edition, cannot avoid some lesser mistakes and errors, for it is practically impossible to prepare a faultless work of this character. The constant changes in business conditions and relations the world over prevent absolute perfection. On the other hand, this International Directory has been made and brought as nearly as possible correct and up to date, and at the hour issued is the most timely undertaking of its kind.

"Among many things within its pages that stand out prominently is the vital fact that it is eminently practical and is quite different from any other directory of similar scope which has been issued. There are other exellent directories. That is not to be denied, and they deserve popularity for their data and purpose; but this one possesses a unique character, field and opportunity. It is difficult to believe that any organization or individual interested in trade expansion would fail to be greatly aided by its information and assistance. Its advantages are numerous and obvious. If it has, as already stated, unavoidable short-comings as has any new directory, these will be corrected by special supplementary data sent out to subscribers from time to time."

The candour of the writer of the foreword is to be commended. No one could afford to produce a fully comprehensive work of this nature at the first attempt. Nevertheless, a good beginning has been made towards putting life into what are usually very dry compendia of information.

A. M.

Engineering Standards

Standard General Specification for Wire Rope. Ottawa, November, 1921, the Canadian Engineering Standards Association.

The useful work being accomplished by the Canadian Engineering Standards Association is once more evidenced by the publication of this booklet, No. 4—1921. It covers the standard grades of steel wire rope for the purposes of mine hoisting and hauling purposes and dredging and steam shovel work. It prescribes the physical properties such as tensile strength, diameter measurements, etc., and also tests to determine whether the wire in question comes up to standard. Copies of the booklet may be obtained from the C. E. S. A. at 25 cents.

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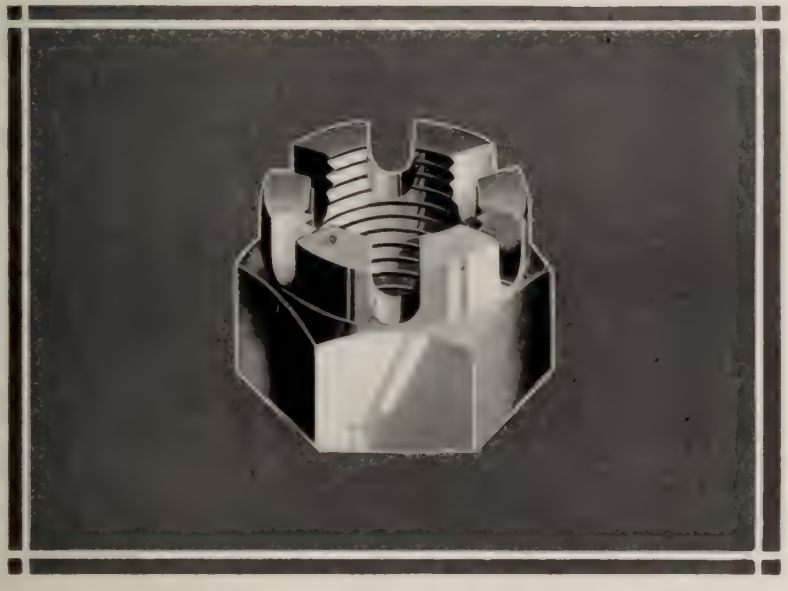
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Export Trade

Exporters' Encyclopaedia, 1922. New York: Exporters' Encyclopaedia Corporation, 280 Broadway.

This is an annual reference book of 1316 pages which covers practically every phase of current export practice, and although compiled from the viewpoint of shippers from the United States, most of the information found in the book is equally valuable to the Canadian exporter. There is authoritative information about trade marks, weights and measures, c. i. f. quotations, cable rules and regulations, foreign currencies, marine insurance, bills of lading, shipping routes, and laws in the different countries in the world which in any way affect commerce. To show the value of the book we might note some of the particulars given about one country. Australia: a general review of the country giving its area, population, production, exports and imports, customs regulations, collection of shippers' drafts, commercial invoices, consular regulations, import restrictions, income tax regulations, ports and trade centres and shipping routes.

In order that the information may be kept up-to-date, supplementary bulletins are issued twice a month giving corrections affecting the contents of the Encyclopaedia, and an information bureau service is available to each subscriber without limitation as to the number of inquiries on each subject. The Encyclopaedia and its supplementary services are of real value to the manufacturer who is engaged in export trade.

Exchange and Trade

Depreciated Exchange and International Trade. United States Tariff Commission Report. Washington: Government Printing Office. 1922.

This report constitutes an interesting and valuable study of the effect of depreciated exchange rates on industry and commerce. Its first part consists of a comparison of international price levels, the purpose of which is to determine to what extent paper prices abroad have risen relative to American prices. The conclusion drawn is that the parity of purchasing power in England and France was considerably less than the exhange rate in the early part of 1919; that by the end of 1919, the two rates approached each other and that in 1920 the parity rate went about as far above the exchange rate as it had been below in the previous year. In 1921, the rates approached each other again. In the case of Germany it was found that the parity rate was far above the exchange rate for the whole period covered.

"The significance of this comparison of purchasing power parities and exchange rates," says the report, "grows out of the fact that, when the parity rate is below the exchange rate, exports from the particular country will be discouraged, and when the parity rate is above the exchange rate, there will be a bounty on exports; that is to say, if the mark in September, 1921, can be bought for less than 1 cent gold and at the same time can be exchanged for about 2 cents worth of goods in Germany, imports from Germany to the United States will be stimulated, in the absence of physical and artificial restraints of trade."

The second section of the report contains international price comparisons for about 75 commodities covering the year 1914, 1919, 1920 and the first nine months of 1921. The fundamental point brought out is that there are varying degrees of price adjustment to a gold basis for various commodities in different countries. The depreciated exchange rates become less and less a disturbing factor in the trade of a particular commodity when its gold price approaches an equality the world over.

The third section of the report deals with the effect of depreciated exchange on wages. Wages in Germany are considered specially and it is shown that Germany possesses a great advantage in world trade in this respect.

The Problem of Strikes

The High Cost of Strikes. By MARSHALL OLDS. New York—G. P. Putnam's Sons.

That strikes are an expensive luxury—or an expensive necessity of life (according to one's point of view)—has long been a matter of common opinion, or rather common knowledge. Just how expensive they are and just how the expense is distributed over the community

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are problems that very few have worked out. This is the task that Mr. Olds has set himself, and his book is undoubtedly a valuable contribution to the subject.

In a series of chapters bristling with concrete cases he discusses the relation of strikes to high cost of food, of clothing and of rent and points out in the most telling way that the increase in cost of goods due to strikes, goes, so far as the public is concerned, by geometric progression. Thus strikes in the spring of 1920 around Providence alone advanced the mill cost of scores of millions of yards of cotton goods 100%. These cotton goods when made up are sold to the public through factors and jobbers and many different kinds of retailers, each of which adds to the price they pay a definite percentage for handling and profit. This means that the price the public pays is not merely the 100% more, but the 100% added to in geometric ratio.

Nor is the high cost of strikes to Labour itself, allowed to pass unnoticed. Thus it is pointed out that in 1919 the loss suffered by workers who did not strike, because of strikes by other workers, amounted to a billion dollars. One has heard of the sympathetic strike; this might be called the "unsympathetic" strike. Incidentally the total loss due to strikes in the United States for the year 1920 is given as five billions.

"What are we going to do?" So reads the title of ChapterXVIII. The answer is: 'Make Labour obey the law". In other words remove the special exemptions and privileges on which the whole modern labour system is founded and which have misled labour leaders into believing that they have a perfect right to set up and perpetuate a monopoly such as public opinion will not tolerate in any other field.

The first of these privileges which labour leaders regard as theirs by a sort of divine ordinance is the right to compel the labouring man, if he wishes to get a job and continue to work, to join the union. upon penalty, in case of refusal, of being branded as a "scab" and denied all opportunity of earning a living for himself or his family. This, Mr. Olds likens—and justifiably so—to the hunting down and suppression of heretics in the old days of religious persecution.

The second special privilege enjoyed by organized Labour is that they are exempted from the operation of one of the most fundamental principles of the common law, namely that acts done by the combination or conspiracy of a number of men are to be judged on a different basis from acts done by individuals. The soundness of this principle is self-evident; it has been tested and approved by the experience of a thousand years. It is the official labour claim, however, that it should not apply to the operations of trades unions. And in England, of course, since 1906 the law actually so provides Whether or not conditions in England require or warrant so startling a departure from the principles of the common law, we on this continent cannot but agree with Mr. Olds that North American conditions call for totally different action, namely for the removal of special privileges and exemptions and the placing of organized labour in the same position before the law as ordinary individuals and groups of individuals. Otherwise there inevitably results that divorce of power from responsibility which is just as dangerous in the 20th century in the field of industrialism as it was in the 15th and 16th centuries in the field of politics.

The conclusion is, not that unions must be entirely eliminated, but that working men should cease to think of themselves as a class apart, as an armed camp set over against the armed camp of the capitalist,—and that instead of waging industrial war (for that is the real significance of strikes and lock-outs) workers and employers should settle the questions arising out of their relationship, in the light of the undoubted fact that, in the long run, their interests are not conflicting but common, and that in industry quite as much as in world politics, war is the most expensive and the least satisfactory method of settling disagreements that man has ever devised.

H. W M.

The Wage Question

A Living Wage. By JOHN A. RYAN, D.D., L.L.D. Toronto.—The MacMillan Co. of Canada, Limited.

Dr. Ryan takes as his starting-point what he describes as "the intrinsic worth and sacredness of personality", with which he couples, as a first principle, "the indestructible right of every man to live a decent human life".

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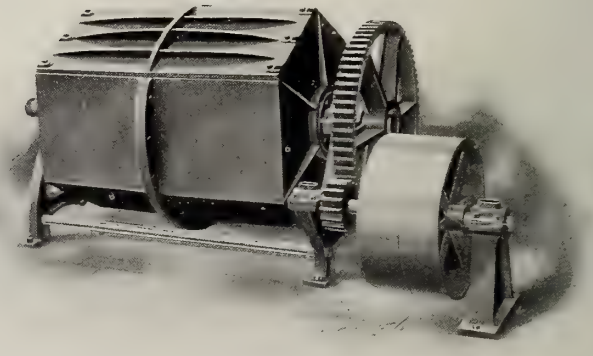
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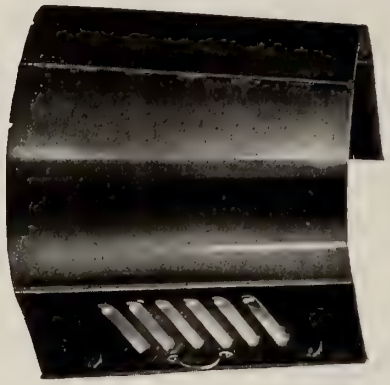
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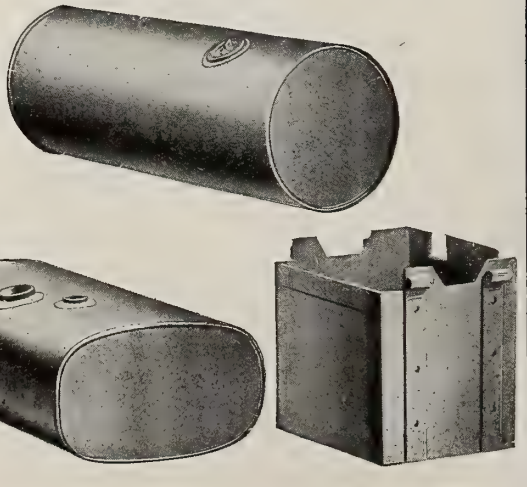
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his best, has "an inalienable right" to receive sufficient remuneration to enable him to maintain the standard of living which is generally considered suitable for people in his class. If we ask on whom is laid the inescapable duty answering to this "inalienable right", Dr. Ryan seems to point in the first place to the employers, and failing them, the State.

Thus the employer, it is maintained, must continue to pay "a living wage", that is, a wage sufficient to maintain "the standard of living", even though it means reducing the return on capital. The wage-right is superior to the interest-right.

As to this, it will be generally agreed that if the "capitalist can", as Dr. Ryan puts it, "ordinarily supply his essential needs through his labour, so that the interest he receives will go to meet his less important needs", while the wage of the labourer is required for the essentials of a livelihood,—if the case were as simple as that, then certainly the wage-right would be superior to the interest-right. But surely the assumption is unwarranted that the 'capitalist" so-called, is devoting the interest from his capital to motor-cars and champagne. Is he not rather, in most cases, devoting the bulk of it to that further development of industry which is to provide work and wages for further wage-earners?

Behind the employer, as a sort of guarantor, stands the State. If the employer fails to do his duty in the matter of the living wage, it is for the State, by means of minimum wage laws, to compel him. Without going into the question of the wisdom or otherwise of minimum wage legislation, it is obvious that the duty laid by Dr. Ryan on the State is in no way commensurate with the right which he postulates as that of the worker. The right is an inalienable and indestructible right, whereas the duty apparently arises only when *wages of some kind are already being paid.* In other words, nothing is said of any duty devolving on the State when, as regards large numbers of workers, no wages at all are being paid.

While, therefore, Dr. Ryan's book is an interesting and thoughtful study of certain aspects of the wages problem, it can hardly be said to have come to grips with the question of how,—in a world which, though economically one community, is inhabited by peoples with the greatest disparity in standards of living, all competing with each other,—a certain standard of living is to be guaranteed to a particular class in a particular country.

However desirable on grounds of public policy and of humanitarianism, the assurance of a living wage to every man can never be said to have been attained so long as labour is one element in a process so delicate as modern industry, so exposed to a hundred, nay a thousand, influences over which particular employers and even particular states have literally no control. Legislatures and economists may propose but economic conditions dispose,—and it avails nothing to talk of the "dignity of human personality" and "man's indestructible right to a decent human life".

H. W. M.

The Mineral Industry

Mica, 1913-1919. His Majesty's Stationery Office, London, 1922. Price 9d. net.

This booklet is a further contribution to the series of reviews of the mineral industries in the British Empire, and foreign countries, which are being published from time to time by the Imperial Mineral Resources Bureau. It is arranged on a plan similar to that used in preceding publications. A general introductory section is followed by statistical notes on production, imports and exports, etc., in various parts of the Empire and in foreign countries. A reference list of technical literature completes the work.

The Production of Coal and Coke in Canada during the Calendar Year, 1920, Ottawa, 1921, Mines Branch, Department of Mines.

This booklet is a supplementary report to the annual report on Canadian mineral production. It gives statistics of production, distribution, exports and imports during the years 1920 and 1919. The

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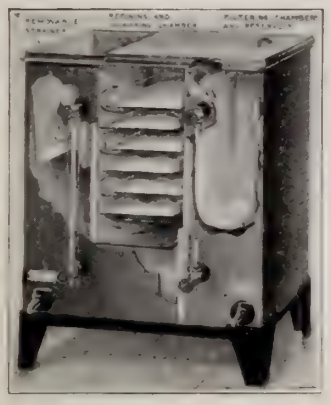
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production of coal during 1920 was 16,631,954 short tons valued at $80,693,723, or an average of $4.85 per ton, as compared with a production in 1919 of 13,681,218 short tons valued at $54,413,349, or an average of $3.98 per ton. This represents an increase in production of 2,950,736 tons, or 21.6 per cent.

The output of coke increased from 1,160,470 short tons in 1919 to 1,306,644 short tons in 1920. Of this latter amount 87.3 per cent. was from by-product ovens. There was also imported during 1920 coke to the tonnage of 586,406.

Gas Producer Trials with Alberta Coals: By John Blizard and E. S. Malloch. Ottawa, 1921, Government Printing Bureau.

This is Bulletin No. 33 of a series describing tests of the steam raising value of Canadian coals which are being conducted by the Division of Fuels and Fuel Testing of the Department of Mines. These investigations were instituted on a large scale in 1913, and the results have since been published from time to time.

The report contains descriptive notes on the varieties of coals tested and the methods used. Detailed results of the trials are given in tabulated form and by means of graphic charts. The booklet should make a valuable addition to technical libraries.

The Production of Copper, Gold, Lead, Nickel, Silver, Zinc and Other Metals in Canada during the Calendar Year 1920. Ottawa, 1921, Mines Branch, Department of Mines.

This report has been compiled by Arthur Buisson, B.Sc., mining engineer in the Division of Mineral Resources and statistics. It covers fifteen minerals, all of which except two, tin and aluminum, occur in commercially utilizable forms in Canada. Tin ores have been found in Canada but not in sufficient quantities to be of economic importance. So far no commercial ores of aluminum have been found in Canada but the metal is produced in large quantities from imported bauxite ores by the Northern Aluminum Company at Shawinigan Falls, Quebec.

For the other metals covered by the report statistical tables of production, imports, exports and prices are given. It is interesting to note the development of the gold mining industry in Ontario as shown by the figures of production. In 1891 the production was 97 fine ounces. This figure increased rapidly to 14,391 ounces in 1900. Then there was a further decline to as low as 1,569 fine ounces in 1909. In 1912 the industry came back strong with a production of 86,253 fine ounces and steady increases since then bring the 1920 figures up to 564,995 fine ounces valued at $11,679,483.

Information About Canada

Canada as a Field for British Branch Industries. Ottawa:—Department of Trade and Commerce, Commercial Intelligence Service. January, 1922.

If there is any efficacy in the circulation of a well-compiled, well-printed descriptive volume, containing the kind of information useful to a British manufacturer, who may contemplate locating a branch in Canada, this handsomely illustrated book of 132 pages seems to possess it. The contents touch on practically every subject that would be of importance to the prospective manufacturer—the economic areas of the country, its natural resources, its trade, the labour situation, water-powers and their industrial importance, tariffs and trade agreements, transportation facilities, information about company incorporation and taxation, the banking system and the peculiar problems of the Canadian market. In each case the information is as complete as the space available warrants.

In a foreword, H. R. Poussette, director of the Commercial Intelligence Service, expresses a certain regret that the manufacturers of the United Kingdom are taking so little part in the industrial development of the Dominion, while United States capital, enterprise and energy have done so much. He alludes to the magnificent reputation enjoyed by British manufacturers for the quality of their goods, for their personal probity and for their business-like methods, and declares that Canada would greatly benefit from the inclusion among her people of as many as possible of those who have built up such a splendid commercial fabric in the United Kingdom.

It is to be hoped that the effort being put forth, through the medium of this book, will have sume practical effect and that, as a result of its publication, some British manufacturers will be attracted to Canada.

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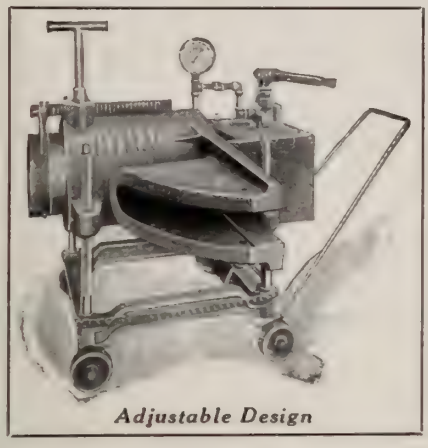
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Recent Trade Enquiries

A list of Enquiries Received from Various Sources including the Canadian Trade Mission, London; the Canadian Trade Commission, Ottawa; the Department of Trade and Commerce, Ottawa; and the Commercial Intelligence Department, C. M. A. Toronto.

DOMESTIC

822. Sales Executive: A sales executive of extensive experience in Canadian grocery lines would like to secure a position with some Canadian firm. He furnishes first-class references.

823. Household Products: A western company manufacturing polishes and cleansing fluids is prepared to act as distributer in the west for eastern manufacturers of household products.

FOREIGN

824. Great Britain: A well-established firm of importers and exportors of good connection throughout the United Kingdom and European countries is open to represent Canadian manufacturers. They are especially interested in engineering articles.

825. New Zealand: A firm in New Zealand wishes to get into communication with Canadian firms manufacturing vulcanized board for making trunks. This firm has been handling for many years fibreboard, millboard and cardboard for the trunk makers, and would like, if possible, to deal with Canadian manufacturers.

826. South Africa: A gentleman who, until recently, has been Manager of the South African Branch of a large American Corporation wishes to return to South Africa and represent one or two good Canadian firms. He is especially interested in automobile accessories and tires. His references are on file in our office.

827. Great Britian: A Canadian, who at present is representing three or four Canadian firms in the United Kingdom, is anxious to take on a few additional lines of Canadian products.

828. British West Indies: A manufacturers' agent in Bridgetown, Bardados, is anxious to get into communication with some Canadian manufacturer who desires representation in these Islands. His references are good.

829. Specialist in Export Trade: A gentleman, who has had considerable experience in the Export Department of several large firms is open to give advise and information on various points which come up in connection with shipments to foreign countries.

830. Expert Representative: A civil Engineer, who for ten years was resident engineer for the El Paso and South Western Railway at El Paso, Texas, has also had a wide experience as a representative of firms, and would like to get in touch with Canadian manufacturers desiring an expert representative in England or elsewhere.

831. British West Indies: We have an inquiry from a merchant in Montserrat, British West Indies, asking to be put into communication with Canadian exporters of flour fish, oats, groceries, hardware, nails and biscuits.

832. Chocolates: A Bristol firm desires the agency for manufacturers of high-class Canadian chocolates, which they are prepared to handle throughout the United Kingdom.

833. Butter and Cheese: A prominent firm of wholesale and retail grocers in Kingston, Jamaica, ask for immediate quotations upon Canadian creamery butter in two-pound tins, packed in half-barrels of 120 pounds, and white cheese packed in boxes of from 30 to 35 pounds each. Quotations to be c.i.f. Kingston for shipment from St. John by the Canadian Pacific steamers in cold storage. Immediate quotations are requested.

834. Biscuits: An established manufacturers' representative in Jamaica considers that he can do well with a line of Canadian biscuits and invites offers.

835. Chemicals: A London firm invite from Canadian manufacturers quotations, c.i.f. United Kingdom, for the following chemicals, of which considerable supplies are required: sulphate of potash, sulphate of ammonia, superphosphates, nitrate of calcium, calcicyanamide.

836. Cotton piece goods, tweeds, suitings and worsteds: An established manufacturers' representative in Kingston, Jamaica, wishes to receive offers from Canadian exporters.

837. Children's Hosiery: An important linen merchant in Kingston, Jamaica, wishes to receive offers from Canadian manufacturers of children's hosiery.

838. Tropical Underwear: An established manufacturers' representative in Jamaica wishes to obtain representation of Canadian manufacturer of light underwear suited for tropical uses.

839. Metals: An old-established business in Birmingham are well situated to deal with the following metals if prices are satisfactory: copper, lead, zinc, nickel, aluminium, babbit metal, brass and bronze.

840. Metals: An old-established firm of metal merchants are anxious to extend their connections with Canada for the trade in all kinds of new or old metals. Would like to hear from both manufacturers and merchants in regard to shipments from or to Canada.

841. General Ironmongery: A Northampton firm can consider offers of wire nailes, wire fencing, tubes and plumbers' supplies.

The Canadian Pacific Route

Bridging two oceans and linking four continents



Every Day in the year Canadian Pacific ships are steaming across two oceans

Service is the supreme test. The Canadian Pacific offers the most efficient and complete Transportation Service in the World.

Rail Service

The Canadian Pacific has over 19,600 miles of railway line. It is the direct link between the busy manufacturing centres of Quebec and Ontario, the Maritime Provinces, the fertile Prairie Provinces, and British Columbia. By its own system alone it serves 2400 stations; by its controlled lines it has through services to Boston, Detroit, Chicago, St. Paul, and Minneapolis, with connections for New York and numerous points on other railways in Canada and the United States. It has also connecting coastal steamship services to Seattle and Alaska.

Passenger Service

Wherever you travel, the Canadian Pacific takes you with speed and comfort. Its splendid passenger service, fast, frequent and luxurious, connects our big cities and reaches our beautiful tourist regions. It operates two through transcontinental trains a day in each direction—and in summer a third, the Trans-Canada Limited, the fastest transcontinental train in North America.

Freight Service

The Canadian Pacific reaches all the principal industrial, commercial and agricultural districts of Canada, and many, with direct connections, in the United States. It has a highly efficient freight service, with 88,000 freight cars in constant transit.

Steamship Services

The Canadian Pacific has 25 passenger and freight steamships on the Atlantic Ocean—linking Canada with Britain, France, Belgium, Italy, the West Indies, Cuba, etc. On the Pacific it has 6 steamships linking Canada to the Orient. Four additional Atlantic and two additional Pacific steamships will be added early in 1922.

The Canadian Pacific has also 49 steamships on the coastal and inland waters of Canada.

The Canadian-Australian Line, operating in connection with the Canadian Pacific, has a service from Canada to Honolulu, Fiji, New Zealand and Australia.

Hotel Service

The Canadian Pacific has fourteen magnificent hotels from the Atlantic Ocean to the Pacific—eight, in leading cities or at important railway junctions, open the year round; six, at beautiful holiday resorts (including four in the Canadian Pacific Rockies) open in summer only. Canadian Pacific hotel service is the standard of excellence.

Telegraph Service

The Canadian Pacific Telegraph system reaches from Atlantic to Pacific. with its own lines into every important point in Canada and with service to every point in the United States. This is the ideal route for commercial and personal business. Cable connections with Europe and the Orient.

Express Service

The Dominion Express Company operates on all rail and steamship lines of the Canadian Pacific and upon other railway and steamship lines. It provides express service—merchandise and financial—of the most efficient standard.

W. B. Howard, District Passenger Agent, Toronto, Ontario.

842. Barrows: A Manchester firm is open to consider offers of navvy barrows.

843. Machinery: A Birmingham firm, if prices and other conditions are satisfactory, are open to import machinery of special kinds.

844. Milking Machines: A firm in Bristol would like to receive catalogues and prices c.i.f. Bristol, of a milking machine capable of milking 16 cows.

845. Machine Tolls: A Nottingham firm handling all kinds of machine tools, new and second-hand, for shipyards, engineers and kindred trades, invites correspondence from exporters.

846. Agriculture Machinery: A large Dutch importer in Gorinchem would like to represent Canadian exportons of agricultural machinery in Holland. Wishes to have catalogues and export price lists.

847. Paper and Box-boards: A Leicester firm is in a position to import printings, writings and folding box-boards.

848. A Nottingham firm inquires for exporters of bank papers, kraft brown wrappings unglazed and M.G. and news in sheets.

849. Paper: A Manchester firm can consider offers of paper of all grades or would represent a first-class manufacturer.

850. Cardboard Egg Packings: A Warrington firm desires to import the standard egg-case fillings as used in Canada.

851. Box Shooks and Sleepers: A Manchester firm is always open to receive quotations on box shooks and sleepers.

852. Deals, Boards and Box shooks: A Birmingham glass works desires to have quotations for deals and boards, box shooks, etc., if same are competitive with those prevailing in the Usited Kingdom.

853. Lubricating Oils, Tallows, Turpentine, Rosin, Tar, etc.: An old-established London firm is open to represent as buyers or agents, representative Canadian manufacturers and shippers of lubricating oils, tallows, turpentine, rosin, tar, etc.

854. Motor Accessories: A Birmingham dealer in motor, particulars of any line in motor accessories suitable for aeroplane and coach accessories would be pleased to have importation to England.

855. Pharmaceutical Supplies: Established broker calling upon the pharmaceutical trade in Jamaica wishes to obtain representation of supplementary lines of pharmaceuticals.

856. Oxygen: Hardware merchants who import all the oxygen used in the building trades in Jamaica, solicit prices from Canadian firms, for immediate purchase.

857. Important: Louvain (Belgian) firm would be glad to have offers of industrial and comestible casein. Banking references available.

Ocean Shipping News

Steamship Sailings

FROM HALIFAX
(Subject to change without notice.)

To London

RAPIDAN	Furness Line	Ab't Mar. 14

To Manchester

MANCHESTER MERCHANT	Manchester Liners	Ab't Mar. 22

To Australia and New Zealand

Melbourne, Sydney, Auckland, Wellington, Lyttleton and Dunedin

CANADIAN PIONEER	C. G. M. M. Ltd.	Ab't Mar. 22

To Barbados, Trinidad and Demerara

CANADIAN COASTER	C. G. M. M. Ltd.	Ab't Mar. 10
CANADIAN BEAVER	C. G. M. M. Ltd.	Ab't Mar. 24
CANADIAN LOGGER	C. G. M. M. Ltd.	Ab't Apr. 7

To Nassau (Bahamas), Kingston, Ja., and Belize, British Honduras

CANADIAN FORESTER	C. G. M. M. Ltd.	Ab't Mar. 8
CANADIAN FISHER	C. G. M. M. Ltd.	Ab't Mar. 29

To St. John's, Newfoundland

ROSALIND	Red Cross Line	Ab't Mar. 7
CANADIAN SAPPER	C. G. M. M. Ltd.	Ab't Mar. 8
SABLE I	Farquhar Co., Ltd.	Ab't Mar. 14
A STEAMER	Tri.National S.S. Corp.	Ab't Mar. 14

To West Coast Newfoundland Ports

STELLA MARIS	Farquhar Co., Ltd.	Ab't Mar. 14

To St. Pierre and Miquelon

PRO PATRIA	Nova Scotia S.S. Co.	Ab't Mar. 8
PRO PATRIA	Nova Scotia S.S. Co.	Ab't Mar. 22

To Santiago, Cuba, Kingston, Montego Bay, St. Ann's Bay, Jamaica

NEVIS	Pickford & Black Ltd.	Ab't Mar. 15

FROM ST. JOHN, N.B. and HALIFAX, N.S.
To Bermuda and British West Indies

	From St. John, N.B.	From Halifax, N.S.
CHIGNECTO	R.M.S.P. Co.	Ab't Mar. 5 / Ab't Mar. 17
CARAQUET	R.M.S.P. Co.	Ab't Mar. 19 / Ab't Mar. 31

To Bremen (Germany)

VEDIC (Cold Stge)	White Star Dom. Line	Ab't Apr. 23

To Liverpool

*MONTCALM (Cold Stge)	Can. Pac. S.S. Ltd.	Ab't Mar. 10
CANADIAN NAVIGATOR	C. G. M. M. Ltd.	Ab't Mar. 14
*MELITA (Cold Stge)	Can. Pac. S.S. Ltd.	Ab't Mar. 17
CANADIAN VOLUNTEER	C. G. M. M. Ltd.	Ab't Mar. 28

MADE IN PREMIER CANADA

Better Than Ever!

Canada's First

Galvanized Sheets

MADE IN PREMIER CANADA

During the period ending 1918 no maker of sheets could control quality—in fact if he could operate at all it was an achievement!

Since then we suffered from the excess prosperity of 1919 and early 1920, delivery being the one essential.

Throughout 1921 and to-day **Premier Galvanized Steel Sheets** returned to the high standard originally set by us, and we are glad to be able to say there's no better sheet made, anywhere on earth. With the quality goes improved service and the price is once more back to sanity.

SOLD BY ALL CANADIAN JOBBERS
USED BY ALL CANADIAN MANUFACTURERS

Dominion Sheet Metal Corporation, Ltd.
HAMILTON - - ONTARIO

CANADIAN GOVERNMENT MERCHANT MARINE LTD.

Canada's Commerce Carriers

In Conjunction With

Canadian National Railways

Operate Services

To all Parts of the World

REGULAR FREIGHT SERVICES

FROM ST. JOHN, N.B.

Great Britain—Liverpool, London, Glasgow, Cardiff and Swansea.

FROM HALIFAX, N.S.

Newfoundland—St. John's, Nfld.

Australasia—Auckland and Wellington, New Zealand, Sydney, Melbourne and Adelaide, Australia.

British West Indies—Barbados, Trinidad and Demerara, Nassau, Bahamas, Kingston, Jamaica and Belize, British Honduras.

South America—Rio de Janeiro and Santos, Brazil, Montevideo, Uruguay and Buenos Aires, Argentina.

FROM VANCOUVER, B.C.

Australasia—Auckland, New Zealand, Sydney and Melbourne, Australia.

China and Japan—Yokohama, Shanghai, Taku Bar.

India and Far East—Calcutta and Bombay.

REGULAR PASSENGER SERVICE

Nassau—Kingston—Belize - - Every Three Weeks

Excellent Accommodation - - Cuisine Unsurpassable

R. B. TEAKLE,
Manager
Montreal, Que.

F. G. WOOD,
General Ontario Freight Agent
Toronto, Ont.

W. A. CUNNINGHAM,
General Freight Agent
Montreal, Que.

MACDONALD MFG. CO., Limited

Toronto - Canada

Manufacturers of

PLAIN and LITHOGRAPHED CONTAINERS

for

Jam	Lard
Fruit	Oil
Vegetables	Paint
Meat	Varnish
Syrup	Tobacco
Butter	Talcum
Biscuits	Tea

Grocers' Sundries
Druggists' Sundries

Also Toys, Novelties, Tags and Advertising Signs

Well packed is half sold
Make your containers advertise you

Office and Works :
145 Spadina Avenue

Shurly & Derrett
Limited
TORONTO

TRADE MARK.

Manufacturers of

TWINES

Mill and Spindle
Binding, Etc., Etc.



The Original and Only Genuine

¶BEWARE OF IMITATIONS SOLD ON THE MERITS OF—

Minard's Liniment

Office and Laboratory : Yarmouth, N.S.
Branch Factory : St. John's, Newfoundland

Bureau of Canadian Information

Ask the Canadian Pacific about Canada
CANADIAN PACIFIC RAILWAY

THE CANADIAN PACIFIC RAILWAY, through its Bureau of Canadian Information, will furnish you with the latest reliable information on every phase of industrial and agricultural development in Canada. In the Reference Libraries maintained at Montreal, Chicago, and New York are complete data on natural resources, climate, labor, transportation, business openings, etc., in Canada. Additional data is constantly being added.

No charge or obligation attaches to this service. Business organizations are invited to make use of it.

CANADIAN PACIFIC RAILWAY
Department of Colonization and Development

165 E. Ontario St. Chicago — 335 Windsor Station Montreal — C. P. R. Bldg., Madison Ave. at 44th St., New York

To London

CANADIAN RAIDER	C. G. M. M. Ltd.	Ab't Mar. 14
*GREY COUNTY	I. C. Transports Ltd.	Ab't Mar. 16
*HOLBROOK (Fan Ventilation)	Can. Pac. S.S. Ltd.	Ab't Mar. 20
CANADIAN RANCHER	C. G. M. M. Ltd.	Ab't Mar. 28

To Glasgow

*ORTHIA (Fan Ventilation)	Anchor-Donaldson Line	Ab't Mar. 9
*GRACIA (Fan Ventilation)	Anchor-Donaldson Line	Ab't Mar. 11
CANADIAN NAVIGATOR	C. G. M. M. Ltd.	Ab't Mar. 14
*METAGAMA (Cold Stge)	Can. Pac. S.S. Ltd.	Ab't Mar. 24
CANADIAN OTTER	C. G. M. M. Ltd.	Ab't Mar. 28

To Cardiff and Swansea

CANADIAN SQUATTER	C. G. M. M. Ltd.	Ab't Mar. 21

To Avonmouth

*ORTHIA (Fan Ventilation)	Anchor-Donaldson Line	Ab't Mar. 9
*DUNBRIDGE (Fan Ventilat'n)	Can. Pac. S.S. Ltd.	Ab't Mar. 11

To Manchester

*MANCHESTER DIVISION	Manchester Line	Ab't Mar. 18

To Belfast

*LORD DOWNSHIRE	Head Line	Ab't Mar. 12
†*BALLYGALLY HEAD	Head Line	Ab't Mar. 14
*KENBANE HEAD	Head Line	Ab't Mar. 25

†Cargo accepted for Londonderry.

To Dublin

*LORD DOWNSHIRE	Head Line	Ab't Mar. 12
†*MELMORE HEAD	Head Line	Ab't Mar. 30

†Cargo accepted for Cork.

To Southampton and Antwerp

*CORSICAN (Cold Stge)	Can. Pac. S.S. Ltd.	Ab't Mar. 11

To Havre and Bordeaux

*GREY COUNTY	I. C. Transports Ltd	Ab't Mar. 16

To Rotterdam and Hamburg

*RAMORE HEAD	Head Line	Ab't Apr. 25

To Rotterdam

*HOLBROOK (Fan Ventilat'n)	Can. Pac. S.S. Ltd	Ab't Mar. 20

To Australia and New Zealand

*PIAKO	New Zealand S. Co.	Ab't Mar. 15

To South Africa

*A STEAMER	Elder Dempster Line	Ab't Mar. 31

To Havana

*SICILIAN (Cold Stge)	Can. Pac. S.S. Ltd.	Ab't Mar. 23

To St. John's Newfoundland

*MAPLEDAWN	Canada S.S. Lines	Ab't Mar. 10

*Sails from West St. John.

FROM VANCOUVER

To Kobe, Yokohama, Shanghai and Taku-Bar

C. G. M. M. LTD.—BLUE FUNNEL LINE JOINT SERVICE

*CANADIAN PROSPECTOR	C. G. M. M. Ltd.	Ab't Mar. 27
‡CANADIAN FREIGHTER	C. G. M. M. Ltd.	Ab't Apr. 15

*Will call at Yokohama and Taku-Bar.
‡Will call at Yokohama and Shanghai.

To Kobe, Yokohama, Hong-Kong and Manila

C. G. M. M. LTD.—BLUE FUNNEL LINE JOINT SERVICE

IXION	Blue Funnel Line	Ab't Mar. 22
TALTHYBIUS	Blue Funnel Line	Ab't Apr. 16

To Kobe, Yokohama, Shanghai, Hong-Kong, Manila and Singapore

HAROLD DOLLAR	Can. Robert Dollar Co.	Ab't Apr. 10

To Kobe, Yokohama, Shanghai, Hong-Kong, Manila, Moji and Nagasaki

§*COAXET	Admiral Line	Ab't Mar. 10
MANILA MARU	Osaka Shosen Kaisha	Ab't Mar. 14
HIMALAYA MARU	Osaka Shosen Kaisha	Ab't Mar. 15
§*†¶AYAHA MARU	Empire Shipping Co.	Ab't Mar. 15
§*WEST JESSUP	Admiral Line	Ab't Mar. 15
§*CITY OF SPOKANE	Admiral Line	Ab't Mar. 17
§*††EASTERN PRINCE	Furness Withy Co.	Ab't Mid. Mar.
§*†¶KUREHA MARU	Yamashita Kisen Kaisha	Ab't Mid. Mar.
§†MONTEAGLE	Can. Pac. S.S. Ltd.	Ab't Mar. 18
*†¶TOKIWA MARU	Nippon Yusen Kaisha	Ab't Mar. 20
*EMPRESS OF RUSSIA	Can. Pac. S.S. Ltd.	Ab't Mar. 23
§*EASTERN MERCHANT	Admiral Line	Ab't Mar. 30
*†EMPRESS OF JAPAN	Can. Pac. S.S. Ltd.	Late Mar.
§*†¶SWEDEN MARU	Yamashita Kisen Kaisha	Late Mar.
*†¶KAGA MARU	Nippon Yusen Kaisha	Ab't Apr. 2
AFRICA MARU	Osaka Shosen Kaisha	Ab't Apr. 3

To Australian and New Zealand Ports

‡NIAGARA	Can. Australasian Line	Ab't Mar. 17
CANADIAN TRANSPORTER	C. G. M. M. Ltd.	Ab't Mar. 20
WAIRUMA	Can. Australasian Line	Ab't Mar. 23
MAKURA	Can. Australasian Line	Ab't Apr. 14

To Calcutta and Bombay (India)

CANADIAN IMPORTER	C. G. M. M. Ltd.	Ab't May. 22

‡Will also call at Honolulu and Suva.
*Does not call at Moji.
†Does not call at Manila.
§Does not call at Nagasaki.
¶Does not call at Shanghai or Hong-Kong.

Enlarge Cuban Service

Canadian Pacific place "Montezuma" on St. John-Havana Kingston Run.

Last December a regular passenger service between St. John, Boston, Havana and Kingston, Jamaica, was inaugurated by the Canadian Pacific S.S. *Sicilian*. This has been found so successful that the large Canadian Pacific cargo ship, *Montezuma*, is being placed in service between these ports. The *Montezuma*, built by Duncan & Company on the Clyde in 1918, is one of the most modern steel cargo ships, of over 5,000 tons, 405.3 feet long, 53 feet wide and 27.4 feet in depth. She made her first trip on the new run from St. John on February 25th, carrying a large Canadian cargo, principally potatoes, fish, flour and newsprint.

The new service is of great importance in its relation to Canadian trade with Cuba and the West Indies as it provides regular and frequent sailings which are indispensable to Canadian exporters if they are to compete successfully with the United States and other countries. The passenger service offers an opportunity for Canadians to visit the Cuban market and establish direct relations with Cuban merchants.

ELDER DEMPSTER LINES

Canada-South Africa Direct Service

Regular monthly sailings from Montreal in Summer and St. John, N.B., in Winter, calling at Cape Town, Algoa Bay (Port Elizabeth), East London, Port Natal (Durban) and Delagoa Bay in the order named.

Canada-West Africa Direct Service

From Montreal in Summer, and from St. John, N.B., in Winter, monthly sailings for Dakar, Sierra Leone, Seccondee, Accra and Lagos, and other ports on the coast, if sufficient inducement offers.

For Sailings, Rates of Freight and Full Particulars, apply to

ELDER DEMPSTER & CO. LIMITED

133 Board of Trade Building
Montreal

Toronto Agent, S. J. Sharp, 79 Yonge St.
Royal Bank Building

Buyers' Guide to Canadian Manufactures

List of Articles which will Enable the Purchaser to Know the Manufacturers of Made-in-Canada Goods. Rates for insertion in this department, $4.00 per heading per year (12 insertions).

ABRASIVES
*Canadian Hart Wheels, Limited, Hamilton, Ont.
*Dominion Abrasive Wheel Co., New Toronto, Ont.
*Norton Company of Canada, Ltd., Hamilton, Ont.

ACCOUNT BOOKS
*The Brown Bros., Ltd., Toronto.

ACCUMULATORS, hydraulic
*The Hydraulic Machinery Co., Limited, Montreal.

ACETYLENE GAS
*The Prest-O-Lite Company of Canada, Ltd., Toronto, Ont.

ACETYLENE GAS BURNERS
Economic Acetylene Burner Co., Toronto, Ont.
*The Prest-O-Lite Company of Canada, Ltd., Toronto, Ont.

ACIDS
*The Grasselli Chemical Co., Ltd., Toronto.
*The Nichols Chemical Co., Ltd., Montreal, Que.

ADVERTISING NOVELTIES
Lawson & Jones, Ltd., London, Ont.

AERATED BEVERAGES
Charles Gurd & Co., Ltd., Montreal, Que.
J. J. McLaughlin, Ltd., Toronto.

AIR COMPRESSORS
*Canadian Ingersoll-Rand Co., Sherbrooke, Que.
*Smart-Turner Machine Co., Ltd., Hamilton, Ont.

AIR LIFT PUMPS
*Canadian Ingersoll-Rand Co., Sherbrooke, Que.

ALCOHOL
*Canadian Industrial Alcohol Company, Ltd., Montreal, Que.

ALKALIES
Brunner, Mond Canada, Limited, Amherstburg, Ont.

ALUMINUM
*Northern Aluminum Co., Ltd., 1805 Traders Bank, Toronto,

ALUMINUM COOKING UTENSILS
"Ideal" Aluminum Products, Ltd., Toronto.

AMMONIA
Canadian Ammonia Co., Ltd., Toronto, Ont.

ANCHORS, all steel
Beauchemin & Fils, Ltd., Sorel, Que.

ANGLE BARS
*Burlington Steel Co., Ltd., Hamilton, Ont.
*MacKinnon Steel Co., Limited, Sherbrooke, Que.
*The Steel Company of Canada, Ltd., Hamilton, Ont.

ARSENIC
*Deloro Smelting & Refining Co., Limited, Deloro, Ont.

ARTIFICIAL LIMBS
Chesley Artificial Limb Co., Ltd., Hantsport, N.S.

ASBESTOS
Atlas Asbestos Company, Limited Montreal, Que.
*Eureka Mineral Wool & Asbestos Co., Toronto, Ont.

ASBESTOS SHEATHING
*Eureka Mineral Wool & Asbestos Co., Toronto, Ont.

ASBESTOS SHEET AND PISTON PACKINGS
Atlas Asbestos Company, Limited, Montreal, Que.
*Eureka Mineral Wool & Asbestos Co., Toronto, Ont.

ASBESTOS STEAM PIPE AND BOILER COVERINGS
Atlas Asbestos Company, Limited, Montreal, Que.
*Eureka Mineral Wool & Asbestos Co., Toronto, Ont.

ASBESTOS TEXTILES
Atlas Asbestos Company, Limited, Montreal, Que.
*Eureka Mineral Wool & Asbestos Co., Toronto, Ont.

AUTOMOBILE PARTS
*Dominion Forge & Stamping Co., Walkerville, Ont.

AUTOMOBILE TIRES
Ames-Holden-McCready, Limited, Montreal, Que.

AWNING CORD (cotton)
Hamilton Cotton Co., Hamilton, Ont.

AXLES
Guelph Spring & Axle Co., Ltd., Guelph, Ont.

AXLES, carriage and automobile
Guelph Spring & Axle Co., Ltd., Guelph, Ont.

BABBITT METAL
Alonzo W. Spooner, Ltd., Port Hope, Ont.
Beveridge Supply Co., Limited, Montreal, Que.
*Hoyt Metal Co., Toronto, Ont.
Magnolia Metal Co. of Canada, Ltd., Montreal, Que.
*The Canada Metal Co., Toronto Ont.
*Tallman Brass & Metal, Ltd., Hamilton, Ont.

BAGS, Cotton
The Canadian Bag Co., Limited, Montreal, Que.

BAGS, jute
The Canadian Bag Co., Limited, Montreal, Que.

BAGS, travelling
J. Eveleigh & Co., Ltd., Montreal
Lamontague, Ltd., Montreal, Que
*The M. Langmuir Mfg. Co., of Toronto, Ltd., Toronto, Ont.

BAND RESAWS
*Canada Machinery Corporation Limited, Galt, Ont.
*P. B. Yates Machine Co., Ltd. Hamilton, Ont.

BAND SAWS
*E. C. Atkins & Co., Inc., Hamilton, Ont.

BANK FITTINGS
The Canadian Office & School Furniture Co., Ltd., Preston, Ont.

BANK AND OFFICE RAILINGS AND CAGES
*Canada Wire and Iron Goods Co., Hamilton, Ont.
*Dennis Wire & Iron Works Co., London, Ont.
*The Geo. B. Meadows, Toronto, Wire, Iron & Brass Works Co., Ltd., Toronto, Ont.

BARRELS, steel, and containers
*Smart-Turner Machine Co., Ltd., Hamilton, Ont.

BARS, iron
London Rolling Mill Co., Ltd., London, Ont.

BARS, steel
London Rolling Mill Co., Ltd., London, Ont.

BASEBALL GOODS
A. J. Reach Co., Brantford, Ont.

BATHS, enamelled
Amherst Foundry Co., Ltd., Amherst, N.S.

BATTERIES, dry
*The Canadian National Carbon Co., Ltd., Toronto, Ont.

BATTERIES, Flashlight
*The Canadian National Carbon Co., Ltd., Toronto, Ont.

BATTERIES, Storage
*The Canadian National Carbon Co., Ltd., Toronto, Ont.

BEARINGS, pillow block and upright
*Canadian Fairbanks-Morse Company, Ltd., Montreal, Que.

BELT HOOKS
*Torrington Company, Limited, Upper Bedford, Que.

BELTING CHAINS
*Canadian Link-Belt Company, Ltd., Toronto, Ont.

BELTING, elevator
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.

BELTING, leather
The Beardmore Belting Co., Ltd., Toronto, Ont.
*J. L. Goodhue & Co., Danville, Que.
*McArthur Beltings, Limited, Brockville, Ont.
*The D. K. McLaren Belting Co., Ltd., Montreal, Que.
*The J. C. McLaren Belting Co., Ltd., Montreal, Que.

BELTING, rubber
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
*Gutta Percha and Rubber Ltd., Toronto, Ont.

BELTING, stitched cotton duck
*Dominion Belting Co., Ltd., Hamilton, Ont.

BENT GOODS
The Crown Lumber Co., Woodstock, Ont.

BISCUITS
The Montreal Biscuit Co., Montreal, Que.

BLACK SHEETS
*A. C. Leslie & Co., Montreal, Que.

BLANKETS
Slingsby Mfg. Co., Ltd., Brantford, Ont.
J. Walshaw & Son, Ltd., Bolton, Ont,

BLANKETS, horse
Slingsby Mfg. Co., Ltd., Brantford, Ont.
J. Walshaw & Son, Ltd., Bolton, Ont.

BLASTING ACCESSORIES
Canadian Explosives, Ltd., Montreal, Que.

BLEACHING POWDER
*Canadian Salt Co., Ltd., Windsor, Ont.

BLOWERS
*The Canadian Blower & Forge Co., Ltd., Kitchener, Ont.

BOATS OF ALL KINDS
Peterboro Canoe Co., Ltd., Peterboro, Ont.

BOBBINS
Canada Spool & Bobbin Co., Ltd., Walkerton, Ont.

BOILER COMPOUND
Beveridge Supply Co., Limited, Montreal, Que.

BOILER COMPOUND AND OILS
Electric Boiler Compound Co., Ltd., Guelph, Ont.

BOILER GRAPHITE
Black Donald Graphite Company, Limited, Calabogie, Ont.

BOILER LININGS AND COVERINGS
Beveridge Supply Co., Ltd., Montreal, Que.

BOILERS
*Canadian Mead Morrison Co., Ltd., Montreal, Que.
*Goldie & McCulloch Co., Limited, Galt, Ont.
*E. Leonard & Sons, Ltd., London, Ont.
J. & R. Weir, Montreal, Que.
Taylor-Forbes Co,, Ltd., Guelph
*The Waterous Engine Works Co., Ltd., Brantford, Ont.

BOILERS, hot water or steam
Warden King, Ltd., Montreal.

BOILERS, steam
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.

BOILERS, steam and brass work
*The Waterous Engine Works Co., Ltd., Brantford, Ont.

BOLTS AND NUTS
*The Canadian Tube & Iron Co., Ltd., Montreal, Que.
*The National Acme Mfg. Co., Montreal, Que.
*The Steel Company of Canada, Ltd., Hamilton, Ont.

BOOKBINDERS
*The Brown Bros., Ltd., Toronto.

BOOKCASES
*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.

BOOKCASES, sectional (Gunn)
The George McLagan Furniture Co., Ltd., Stratford, Ont.

BOOKS, blank
*The Brown Bros., Ltd., Toronto.

BOOTS AND SHOES
Ames—Holden—McCready, Limited, Montreal, Que.
J. Leckie Co., Ltd.
The John Ritchie Co., Ltd., Quebec, Que.

BOXES, cellular and fibre board
*Hinde & Dauch Paper Co. of Canada, Limited, Toronto.
*Thompson & Norris Co., of Canada, Ltd., Toronto and Montreal.

BOXES, steel shop
*Steel Trough and Machine Co., Ltd., Tweed, Ont.

BOXES AND SHOOKS, wooden
The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.

BOXES, wooden
Barchard & Co., Ltd., Toronto.

BRAKE SHOES
*Canadian Hart Wheels, Limited Hamilton, Ont.

BRANDS, burning
Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS AND BRONZE WIRE
*Standard Underground Cable Co of Canada, Ltd., Hamilton, Ont.

BRASS ENGRAVERS
Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS FOUNDERS AND FINISHERS
*The Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.
Sully Brass Foundry, Limited, Toronto
*Tallman Brass & Metal, Ltd., Hamilton, Ont.

*For Display Advertisement see Index, Page 41

The James Morrison Brass Mfg Co., Ltd., Toronto, Ont.
*The Kerr Engine Co., Limited. Walkerville, Ont.

BRASS RODS, SHEETS AND PLATES
*Brown's Copper and Brass Rolling Mills, Ltd., New Toronto.

BRASS TUBING, seamless
Canadian Seamless Wire Co., Ltd., Toronto, Ont.

BRASS WIRE
Canadian Seamless Wire Co., Ltd., Toronto.

BRASS WORK, church
Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS WORK, special
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.

BRICK
National Brick Co. of Laprairie, Laprairie, Que.

BRICK, enamel
National Brick Co. of Laprairie, Laprairie, Que.

BRICK, pressed
National Brick Co. of Laprairie Laprairie, Que.

BRICK, rubbing
*Canadian Hart Wheels, Limited. Hamilton, Ont.

BRICK, sewer.
National Brick Co. of Laprairie, Laprairie, Que.

BRIDGES, Railway and Highway
*Canadian Des Moines Steel Co., Limited, Chatham.
*Hamilton Bridge Works Co., Ltd., Walkerville, Ont.
*The Canadian Bridge Co., Ltd., Hamilton, Ont.
*McGregor & McIntyre, Ltd., Toronto, Ont.
*Dominion Bridge Co., Montreal.
*Mackinnon Steel Co., Ltd., Sherbrooke, Que.

BROOMS
Simms, T. S., & Co., Limited, St. John, N.B.
Stevens-Hepner Co., Limited, Port Elgin, Ont.

BRONZE SHEETS, RODS, PLATES
*Brown's Copper and Brass Rolling Mills, Ltd., New Toronto. Que.

BRUSHES
Simms, T. S., & Co., Limited, St. John, N.B.
Stevens-Hepner Co., Ltd., Port Elgin, Ont.

BRUSHES, MOTOR AND GENERATOR
Dominion Carbon Brush Co., Toronto.

BRUSHES, carbon
*Canadian National Carbon Co., Ltd., Toronto.

BUCKET TANKS
*MacKinnon Steel Co., Ltd., Sherbrooke, Que.
*The Bennett & Wright Co., Ltd., Toronto, Ont.

BUILDING FELT AND PAPER
Beveridge Supply Co., Limited, Montreal, Que.
*Eureka Mineral Wool & Asbestos Co., Toronto, Ont,
*The Barrett Co., Ltd., Toronto and Montreal

CHEMICALS
Canadian Laboratory Supplies, Ltd., Toronto, Ont.
*The Grasselli Chemical Co., Ltd., Toronto, Ont.
*The Nichols Chemical Co., Ltd. Montreal, Que.

BUNGS, wooden for barrels
Wm. H. White, Ville St. Pierre, Montreal, Que.

BUCKLES, shoe and coat
Parmenter & Bulloch Co., Limited, Gananoque, Ont.

BURLAPS
The Canadian Bag Co., Limited, Montreal, Que.

BURLAPS, decorative
Dominion Oil Cloth and Linoleum Co., Limited, Montreal, Que.

CABLES, electric light, power, telephone and telegraph
*Northern Electric Company, Limited, Montreal, Que.
*Standard Underground Cable Co. of Canada, Ltd., Hamilton, Ont.

CABLES, wire
*The Dominion Wire Rope Co., Ltd., Montreal, Que.
*The B. Greening Wire Co., Ltd., Hamilton, Ont.

CALENDARS, ADVERTISING NOVELTIES, etc.
Lawson & Jones, Ltd., London.

CAMERAS
Canadian Kodak Co., Ltd., Toronto, Ont.

CAMPERS' OUTFITTERS
Slingsby Mfg. Co., Ltd., Brantford, Ont.

CANADA SILVER
*Brown's Copper and Brass Rolling Mills, Ltd., New Toronto.

CHICLETS & CHEWING GUM
Canadian Chewing Gum Company, Ltd., Toronto.

CANOES
Peterboro Canoe Co., Ltd., Peterboro, Ont.
The "Canadian" Canoe Co., Ltd., 216 Rink St., Peterborough, Ont.

CANS, baking powder, etc.
American Can Co., Montreal (Que.) and Hamilton (Ont.).
A. R. Whittall Can. Co., Ltd., Montreal, Que.
*MacDonald Mfg. Co., Ltd., Toronto Ont.

CANS, fruit
American Can Co., Montreal (Que.) and Hamilton (Ont.).
A. R. Whittall Can Co., Ltd., Montreal, Que
*MacDonald Mfg. Co., Ltd., Toronto, Ont.

CANS, iron, lead and putty
A. R. Whittall Can. Co., Ltd., Montreal, Que.

CANS, tin
A. R. Whittall Can. Co, Ltd., Montreal, Que.
American Can Co.. Montreal (Que.) and Hamilton (Ont.).
*MacDonald Mfg. Co., Ltd., Toronto, Ont.

CAPS, cloth
John W. Peck & Co., Ltd., Montreal, Que.

CARBIDE
*Canada Carbide Co., Ltd., Montreal. Que.

CARBONS-PROJECTOR
*Canadian National Carbon Co., Toronto, Ont.

CARBONIC ACID GAS
*Canadian Carbonate Co.. Montreal.
*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.

BRASS GOODS
*The Booth-Coulter Copper & Brass Co.. Ltd.. Toronto. Ont.

CARPETS AND RUGS
Toronto Carpet Mfg. Co., Limited, Toronto.

CARRIERS, box and barrel
*Canadian Mathews Gravity Carrier.

CARRIERS
*Richards-Wilcox Canadian Co., Ltd., London, Ont.

CARRIERS, brick
*Canadian Mathews Gravity Carrier Co., Limited, Toronto.
*Richards-Wilcox Canadian Co., Ltd., London, Ont.

CARS
*National Steel Car Co., Ltd., Hamilton, Ont.

CARS, industrial
*MacKinnon Steel Co., Ltd,, Sherbrooke, Que.

CARTONS, lithographed
Consolidated Lithographing and Mfg. Co.. Ltd.. Montreal, Que.
Harris Lithographing Co., Ltd. Toronto, Ont.

CASTINGS, Alloy
*The Electric Steel & Metals Co., Ltd., Welland, Ont.

CASTINGS, aluminum, brass and bronze
*Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.
Fittings Limited, Oshawa, Ont.
Sully Brass Foundry, Limited, Toronto.

CASTINGS, grey iron
*Canadian Rumely Co., Ltd., Toronto, Ont.
Fittings Limited, Oshawa, Ont.
*The Goldie & McCulloch Co., Ltd Galt. Ont.
*Wm. Kennedy & Sons, Ltd., Owen Sound. Ont.

CASTINGS, malleable iron
Fittings Limited, Oshawa, Ont.
*Galt Malleable Iron Co., Ltd.. Galt. Ont
Mapleleaf Manufacturing Comp- Smith's Falls, Ont.

CASTINGS, steel
Beauchemin & Fils, Ltd., Sorel Que.
*Canadian Steel Founderies, Ltd. Montreal, Que.
*Dominion Foundries and Steel Co.. Ltd.. Hamilton. Ont.
*Electric Steel & Metals Co., Ltd. Welland, Ont.
*Wm Kennedy & Sons, Ltd., Owen Sound. Ont.

CATALOGUE MAKERS
Grip, Ltd., Toronto, Ont.

CATALOGUE COVERS, by new lithographing process
Harris Lithographing Co., Ltd., Toronto, Ont.

CAUSTIC SODA
*Canadian Salt Co., Ltd., Windsor.

CEMENT WATERPROOFING
*Trussed Concrete Steel Company of Canada, Ltd., Walkerville, Ont.

CEMENTS, High Temp.; plastic, liquid
Beveridge Supply Co., Limited, Montreal, Que.

CENTRIFUGAL PUMPS
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

CHAIN, Detachable & Riveted
Fittings Limited, Oshawa, Ont.

CHAINS, for elevators, conveyors and drives
*Canadian Link-Belt Company, Ltd., Toronto, Ont.
Dodge Manufacturing Co. of Canada, Ltd., Toronto.

CHAIRS
*Office Specialty Mfg. Co., Ltd Newmarket, Ont.

CHAIRS; Folding and Assembly Seating
Stratford Mfg. Co., Ltd., Stratford, Ont.

CHAIRS, rattan and upholstered
Imperial Rattan Co., Ltd., Stratford, Ont.

CHEMISTS, industrial
*Milton Hersey Co., Montreal.

CIRCULAR CUTTERS, solid steel
*Galt Knife Co., Ltd.
The Peter Hay Knife Co., Ltd., Galt, Ont.

CIRCULAR SAWS
*E. C. Atkins & Co., Inc., Hamilton, Ont.

CLAM SHELL BUCKETS
*Canadian Mead Morrison Co., Ltd.. Montreal. Que.

CLOCKS, time
*International Business Machines Co., Ltd., Toronto, Ont.

CLOCKS, watchmen's
*The Bennett & Wright Co., Ltd., Toronto, Ont.

CLOSET SEATS
*Goderich Organ Co., Goderich,Ont.

CLOTHING
John W. Peck & Co., Ltd., Montreal, Que.

CLOTHING, leather and sheepskin lined coats
*A R. Clarke & Co., Ltd., Toronto

CLOTHING, Mackinaw
The Carss Mackinaw Clothing Co. Ltd., Orillia. Ont.

CLOTHES LINES, cotton
Hamilton Cotton Co., Hamilton Ont.

COAL
*Nova Scotia Steel & Coal Co., Ltd. New Glasgow, N.S.
Standard Fuel Co., Toronto, Ont

COBALT OXIDE
*Deloro Smelting & Refining Co. Ltd., Deloro, Ont.
The Coniagas Reduction Co., Ltd. St. Catharines, Ont.

COBALT METAL
*Deloro Smelting & Refining Co.. Ltd., Deloro, Ont.

COFFEE
S. H. Ewing & Sons, Montreal

COLD DRAWN SHAPES, flats, squares and hexagons
*The Canadian Drawn Steel Co.. Ltd., Hamilton, Ont.
*Union Drawn Steel Co.. Ltd. Hamilton. Ont.

COLD STORAGE DOORS
*John Hillock & Co., Ltd., Toronto.

Collars
"Kantkrack" Composition
Parsons & Parsons Canadian Co., Hamilton, Ont.

COLORS
*A. Ramsay & Son Co., Montreal.

COMMERCIAL STATIONERY
*Brown Bros., Ltd., Toronto, Ont.

CONCRETE COATINGS, PAINTS, Etc.
*The Imperial Varnish & Color Co., Ltd., Toronto, Ont.

CONCRETE HARDENER AND WATERPROOFER
Beveridge Supply Co., Limited, Montreal, Que.
Sturgeons Limited, Toronto.

CONDENSERS, Barometic
*Canadian Ingersoll-Rand Co., Sherbrooke, Que.

CONDENSERS, jet and surface
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

CONDENSERS, rotary jet
*The Goldie & McCulloch Co., Ltd Galt. Ont.

CONDUIT FOR INTERIOR WIRING
*Conduits Co., Ltd., Toronto. Ont
*National Conduit Co., Limited. Toronto.

*For Display Advertisement see Index, Page 41

CONFECTIONERY
Ganong Bros., Ltd., St. Stephens N.B.
Moirs, Ltd., Halifax, N.S.
The Montreal Biscuit Co., Montreal, Que.

CONTAINER BOARD—strong container
*Bathurst Lumber Co., Ltd., Bathurst, N.B.

CONTRACTOR'S PLANT
*Canadian Mead Morrison Co., Ltd., Montreal, Que.

CONVEYORS
*Canadian Link-Belt Company, Ltd., Toronto, Ont.
*Canadian Mathews Gravity Carrier Co., Toronto.
Dodge Manufacturing Co. of Canada, Ltd., Toronto.

COPPER
*Booth-Coulter Copper & Brass Co. Ltd., Toronto, Ont.
*Consolidated Mining & Smelting Co. of Canada, Ltd., Montreal.

COPPER, SHEETS, PLATES, BARS RODS
*Brown's Copper and Brass Rolling Mills, Ltd., New Toronto, Ont.
*Booth-Coulter Copper & Brass Co Ltd., Toronto, Ont.

COPPERSMITHS
*Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.

COPPER TUBING, seamless
Canadian Seamless Wire Co., Ltd., Toronto, Ont.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.

CONDUIT-FLEXIBLE-"BRAIDUCT"
The Dalyte Electric Limited, Guelph, Ont.

COPPER WIRE
Canadian Seamless Wire Co., Ltd., Toronto, Ont.
*Standard Underground Cable Co. of Canada, Ltd., Hamilton, Ont.

COPYRIGHTS
Harold C. Shipman & Co., Ottawa, Ont.

CORKS
S. H. Ewing & Sons, Montreal, Que.

CORK CARPET
Dominion Oil Cloth and Linoleum Co., Ltd., Montreal, Que.

CORRUGATED PAPER BOXES
Corrugated Paper Box Co., Ltd., Toronto, Ont.
*Hinde & Dauch Paper Co. of Canada, Limited. Toronto.
Standard Paper Box Company, Ltd., Montreal, Que.
*Thompson & Norris Co., of Canada, Ltd., Toronto and Montreal.

CORSETS
Dominion Corset Co., Quebec, Que.

COTTONS
*Montreal Cottons, Ltd., Valleyfield, P.Q.

COTTONADES
Hamilton Cotton Co., Hamilton, Ont.

COUPLERS
*Canadian Steel Foundries, Ltd., Welland, Ont.

CRANES
*Northern Crane Works, Walkerville, Ont.
*The Herbert Morris Crane and Hoist Co., Ltd., Niagara Falls, Ont.

CREAM CHEESE, Ingersoll
The Ingersoll Packing Co., Ltd., Ingersoll, Ont.

CREAM SEPARATORS AND MILK CLARIFIERS
De Laval Dairy Supply Co., Peterboro, Ont.

CREAMERY AND CHEESE FACTORY MACHINERY AND SUPPLIES
De Laval Dairy Supply Co., Ltd., Peterboro, Ont.

CREOSOTED MATERIALS
*The Barrett Co., Ltd., Toronto and Montreal.

CRUSHERS, Rock and Ore
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.

CUPOLAS
*Northern Crane Works, Ltd., Walkerville, Ont.

CUPS, presentation
Standard Silver Co., Toronto, Ont.

CURTAINS, chenille
Hamilton Cotton Co., Hamilton, Ont.

CUTLERY
Standard Silver Co., Toronto, Ont.

CUTTERS, machine
*Pratt & Whitney Co., Dundas, Ont.

DECALCOMANIA TRANSFERS
Canada Decalcomania Co., Toronto, Ont.

DENIMS
Hamilton Cotton Co., Hamilton, Ont.

DERAILS
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

DESIGNERS AND PRINTERS OF BOOKLETS, Etc.
Grip, Ltd., Toronto, Ont.

DESIGNERS OF LABOR SAVING DEVICES
Harold C. Shipman & Co., Ottawa, Ont.

DESKS
*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.
The Macey Office Equipment Co., Toronto.

DIE CASTINGS
*Tallman Brass & Metal, Limited Hamilton, Ont.

DIES
*Butterfield & Co., Rock Island, P.Q.
*Pratt & Whitney Co., Dundas, Ont.

DIES, for metal stampings.
Larsen & Shaw, Ltd., Walkerton.

DINING ROOM SUITES
The George McLagan Furniture Co., Ltd., Stratford, Ont.

DISINFECTING APPARATUS

DOOR HANGERS
*Richards Wilcox Canadian Co., Ltd., London, Ont.

DREDGES
*Canadian Mead Morrison Co., Ltd., Montreal, Que.

DRILL PRESSES
*Canada Machinery Corporation, Ltd., Galt, Ont.

DRILL SHARPENERS
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.

DRILLS
*John Morrow Screw & Nut Co., Ltd., Ingersoll, Ont.
*Pratt & Whitney Co., Dundas, Ont.

DRIFT BOLTS OR SPIKES
London Rolling Mill Co., Ltd., London, Ont.

DROP HAMMERS
*Canada Machinery Corporation, Ltd., Galt, Ont.

DRUMS, steel, and containers
*Smart-Turner Machine Co., Ltd., Hamilton, Ont.

DRY COLORS
*The Imperial Varnish & Color Co., Ltd., Toronto.

DUMB WAITERS
Turnbull Elevator Mfg. Co., Toronto, Ont.

DURABLE WIRE ROPE
*The Dominion Wire Rope Co., Ltd., Montreal, Que.

DYNAMITE
Canadian Explosives, Ltd., Montreal, Que.

DYNAMOS
*Jones & Moore Electric Co., Ltd., Toronto, Ont.
*The Canadian Crocker-Wheeler Co., Ltd., St. Catharines, Ont.

DYNAMOS, plating
*Jones & Moore Electric Co., Ltd., Toronto, Ont.

EIDERDOWN
Galt Knitting Co., Ltd., Galt, Ont

ELECTRICAL AND GAS FIXTURES
W. H. Banfield & Sons, Toronto.
The Garth Co., Montreal, Que.
The James Morrison Brass Mfg. Co., Ltd., Toronto, Ont.
*Tallman Brass & Metal, Ltd., Hamilton, Ont.

ELECTRIC APPLIANCES
*Canadian Crocker-Wheeler Co., Ltd., St. Catharines, Ont.
*Canadian Westinghouse Co., Ltd., Hamilton, Ont.

ELECTRIC LAMPS
The Dalyte Electric Limited, Guelph, Ont.

ELECTRICAL COMPOUNDS
Standard Paint Co. of Canada, Ltd., Montreal, Que.

ELECTRIC PLATE WARE
Roden Bros., Ltd., Toronto, Ont.

ELECTRICAL WIRING DEVICES
W. H. Banfield & Sons, Toronto.

ELECTRODES, carbon
*Canadian National Carbon Co., Ltd., Toronto, Ont.

ELECTROTYPING
Central Press Agency, Ltd., Toronto.

ELECTRICAL SUPPLIES
*Canadian Westinghouse Co., Ltd., Hamilton, Ont.
*Jones & Moore Electric Co., Ltd.,
*Northern Electric Co., Ltd., Montreal, Que.

ELECTRO-SILVER PLATED WARE
Standard Silver Co., Toronto, Ont

ELEVATING MACHINERY
*Canadian Link-Belt Company, Ltd., Toronto, Ont.
*Canadian Mathews Gravity Carrier Co., Toronto, Ont.
Dodge Manufacturing Co. of Canada, Ltd., Toronto.

ELEVATORS
*Mackinnon Steel Co., Ltd., Sherbrooke, Que.
Turnbull Elevator Mfg. Co., Toronto, Ont.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.
*Northern Crane Works, Ltd., Walkerville, Ont.

ELEVATORS FOR ALL PURPOSES
*The Waterous Engine Works Co., Ltd., Brantford, Ont.

ELEVATOR GATES AND DOORS
Turnbull Elevator Mfg. Co., Ltd., Toronto, Ont.
*The A. B. Ormsby Co., Ltd., Toronto, Ont.

ELEVATOR GUARDS
*The Geo. B. Meadows, Toronto Iron & Brass Goods Works Co. Ltd., Toronto, Ont.
*Canada Wire and Iron Goods Co., Hamilton, Ont.

EMERY GRINDERS
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

EMERY WHEELS
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

ENAMELS
Berry Brothers, Inc., Walkerville, Ont.
Dominion Paint Works, Limited, Walkerville, Ont.
*The Imperial Varnish & Color Co., Ltd., Toronto, Ont.

ENAMEL AND TIN WARE
*McClary Mfg. Co., London, Ont

ENGINES
*E. Leonard & Sons, Limited, London, Ont.
*Goldie & McCulloch Co., Ltd., Galt, Ont.
J. & R. Weir, Montreal, Que.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.

ENGINES, gas and gasoline
*Canadian Fairbanks-Morse Co. Ltd., Montreal, Que.
*Hamilton Motor Works, Ltd., Hamilton, Ont.
*Massey-Harris Co., Ltd., Toronto

ENGINES, gasoline, tractor, plowing and threshing
Sawyer-Massey Co., Ltd., Hamilton, Ont.

ENGINES, hoisting
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.
*Canadian Mead Morrison Co., Ltd., Montreal, Que.
*The Waterous Engine Works Co. Ltd., Brantford, Ont.

ENGINES, marine, gasoline and kerosene
Bruce, Stewart & Co., Ltd., Charlottetown, P.E.I.

ENGINES, steam plowing and threshing
Sawyer-Massey Co., Ltd., Hamilton, Ont.

ENGRAVERS, photo
Grip, Ltd., Toronto, Ont.

ENGRAVERS, half-tone
Grip, Ltd., Toronto.

ENGRAVERS AND PRINTERS steel plate
American Bank Note Co., Ottawa, Ont.

ENGRAVERS AND PRINTERS bank note
American Bank Note Co., Ottawa, Ont,

ENGRAVING
*J. L. Jones Engraving Co., Toronto, Ont.

ENGRAVING, copper and steel plate
Pritchard-Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

ENSILAGE AND STRAW CUTTERS
J. Fleury's Sons, Aurora, Ont.
*Ontario Wind Engine & Pump Co., Ltd., Toronto, Ont.

ENVELOPES
*Barber-Ellis Co., Ltd., Toronto.
Canada Envelope Co., Montreal, Que.

EXPANSION BOLTS
Beveridge Supply Co., Limited, Montreal, Que.

EXPERTS IN PATENT CAUSES
*Ridout & Maybee, Toronto, Ont.

EXPLOSIVES, high
Canadian Explosives, Ltd., Montreal, Que.

FACE PLATE JAWS
*Ker & Goodwin, Brantford, Ont.

FACTORY SUPPLIES, cheese and creamery
De Laval Dairy Supply Co., Ltd., Montreal, Que.

FANS
*The Canadian Blower & Forge Co., Ltd., Kitchener, Ont.

FENCING, wire
*C. H. Johnson & Sons, Ltd., Montreal, Que.

FELTS, pulp and paper makers
Ayers, Ltd., Lachute Mills, P.Q.

FENCES AND GATES
*Dennis Wire & Iron Works Co., London, Ont.
*Canada Wire & Iron Goods Co., Hamilton, Ont.
*Frost Steel & Wire Company, Limited, Hamilton, Ontario.

FIBRE PAILS
*The E. B. Eddy Co., Ltd., Hull, Que.

FIBRE (vulcanized), sheets, rods, tubes, etc.
*The Diamond State Fibre Co. of Canada, Ltd., Toronto.

FIBREBRICK, Plastic, jointless
Beveridge Supply Co., Limited, Montreal, Que.

FILES.
Henry Disston & Sons, Ltd., Toronto, Ont.
*John Morrow Screw & Nut Co., Ltd., Ingersoll, Ont.
*The Nicholson File Co., Port Hope.
The Ingersoll File Company, Ltd. Ingersoll, Ont.

FILING CABINETS
*Office Specialty Co., Newmarket, Ont.

FILING DEVICES
The Macey Office Equipment Co., Toronto.

FILING EQUIPMENT, wood & steel
*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.

FILING SYSTEMS
*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.

FIRE ALARMS
*Northern Electric Co., Ltd., Montreal, Que.

FIRE BRICK
Dominion Fire Brick & Clay Products, Ltd., Moose Jaw, Sask.
FIRE BRICK AND CLAY
Dominion Fire Brick & Clay Products, Ltd., Moose Jaw, Sask.
FIRE BRICK, PLASTIC
Beveridge Supply Co., Limited, Montreal, Que.
FIRE DOOR HARDWARE
*Richard Wilcox Canadian Co., Ltd., London, Ont.
FIRE DOORS
*A. B. Ormsby Co., Ltd., Toronto.
*The Pedlar People, Ltd., Oshawa, Ont.
FIRE ENGINES
American LaFrance Fire Engine Company of Canada, Limited, Toronto.
*Waterous Engine Works Co., Ltd., Brantford, Ont.
FIRE ESCAPES
American LaFrance Fire Engine Company of Canada, Limited, Toronto.
Canadian Des Moines Steel Co., Chatham, Ont.
*Canada Wire & Iron Goods Co., Hamilton, Ont.
*Dennis Wire & Iron Works Co., London, Ont.
*McGregor & McIntyre, Ltd., Toronto, Ont.
FIRE EXTINGUISHERS
*A. B. Ormsby Co., Ltd., Toronto
American LaFrance Fire Engine Company of Canada, Limited, Toronto.
*Booth-Coulter Copper & Brass Co. Ltd., Montreal, Que.
*The Bennett & Wright Co., Ltd. Toronto, Ont.
FIRE FIGHTING APPARATUS
American LaFrance Fire Engine Company of Canada, Limited, Toronto.
*Waterous Engine Works Co., Ltd., Brantford, Ont.
FIRE HOSE
*Canadian Consolidated Rubber Co. of Canada, Ltd., Montreal, Que.
*Gutta Percha & Rubber, Ltd., Toronto, Ont.
FIRE PREVENTION MATERIAL
*Chicago Bridge & Iron Works Bridgeburg, Ont.
*Eureka Mineral Wool & Asbestos Co., Toronto.
*The Bennett & Wright Co., Ltd., Toronto, Ont.
FIRE PROOF WINDOWS AND DOORS
*Canadian Metal Window & Steel Products, Limited, Toronto.
*A. B. Ormsby Co., Ltd., Toronto.
*Pedlar People, Ltd., Oshawa, Ont
*Trussed Concrete Steel Company of Canada, Ltd., Walkerville, Ont.
FIRE PROTECTION SYSTEMS
*Canadian Des Moines Steel Co., Limited, Chatham.
FIRE SPRINKLER SYSTEMS
*Chicago Bridge & Iron Works Bridgeburg, Ont.
*The Bennett & Wright Co., Ltd. Toronto, Ont.
*Purdy Mansell Co., Toronto, Ont
FIRE AND WATER DEPARTMENT
*Chicago Bridge & Iron Works Bridgeburg, Ont.
The Garth Co., Montreal, Que.
FISH, Atlantic Sea-Foods
Maritime Fish Corporation, Ltd. Montreal, Que.
FITTINGS, Pipe
Fittings Limited, Oshawa, Ont.
FITTINGS FOR SOIL PIPE
Anthes Foundry, Ltd., Toronto.
FITTINGS, steam
Warden King Ltd., Montreal, Que
FLOORING, hardwood
Seaman Kent Co., Ltd., Meaford, Ont.
FOLDING PAPER BOXES
Standard Paper Box Company, Ltd, Montreal, Que.
FORGES
*Canadian Blower & Forge Co., Ltd., Kitchener, Ont.
FORGINGS
*Canada Foundries & Forgings Co., Welland, Ont.
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
FORGINGS, drop
*Dominion Forge & Stamping Co., Walkerville, Ont.
FOUNDRY EQUIPMENT
*Northern Crane Works, Ltd., Walkerville, Ont.
FOUNTAIN FRUITS AND JUICES
J. J. McLaughlin, Ltd., Toronto.
FROGS AND CROSSINGS, manganese
Canadian Ramapo Iron Works, Ltd., Niagara Falls, Ont.
FUEL
Standard Fuel Co., Toronto, Ont.
FUR GARMENTS, men's and women's
Holt, Renfrew, Ltd., Quebec.
FUR GOODS
John W. Peck & Co., Ltd., Montreal, Que.
FURNACES
*McClary Mfg. Co., London, Ont.
FURNITURE; Camp and Verandah and Novelties
The Stratford Mfg. Co., Limited, Stratford, Ont.
FURNITURE, hall
The George McLagan Furniture Co., Ltd., Stratford, Ont.
FURNITURE, office
The Canadian Office & School Furniture Co., Ltd., Preston, Ont.
FURNITURE, reed and rattan
Imperial Rattan Co., Ltd., Stratford, Ont.

FUSES
*Economy Fuse & Mfg. Co., Montreal, Que.
GALVANIZED IRON
*A. C. Leslie & Co., Montreal.
GALVANIZED SHEETS
*Dominion Sheet Metal Co., Hamilton, Ont.
*The A. B. Ormsby Co., Ltd., Toronto, Ont.
GALVANIZERS
Acme Stamping & Tool Works, Ltd., Hamilton, Ont.
Fittings Limited, Oshawa, Ont.
*Ontario Wind Engine & Pump Co., Ltd., Toronto, Ont.
*The Pedlar People, Ltd., Oshawa.
GALVANIZED CUSTOM WORK
The Goold, Shapley & Muir Co., Ltd., Brantford, Ont.
GASOLINE ENGINES
*Ontario Wind & Pump Co., Ltd., Toronto, Ont.
De Laval Dairy Supply Co., Ltd., Peterboro, Ont.
*The Goold Shapley & Muir Co., Limited, Brantford, Ont.
GASOLINE FIRE ENGINES
American LaFrance Fire Engine Company of Canada, Limited, Toronto.
*Waterous Engine Works Co., Ltd., Brantford, Ont.
GASOLINE STORAGE SYSTEMS, special underground
*S. F. Bowser & Co., Toronto.
*Steel Trough & Machine Co., Ltd Tweed, Ont.
GASOLINE
*The Imperial Oil Co., Ltd., Toronto, Ont.
GEARS, cut
*Hamilton Gear and Machine, Toronto.
GEARS (noiseless, waterproof)
*The Diamond State Fibre Co. of Canada, Ltd., Toronto.
GELATINE
Canada Gelatine Co., Ltd., Brantford, Ont.
GENERATORS
*Canadian Crocker-Wheeler Co. Ltd., St. Catharines, Ont.
*Canadian Westinghouse Co., Ltd., Hamilton, Ont.
GLASSWARE
Dominion Glass Co., Ltd., Montreal, Que.
GLASSWARE, cut
Rodan Bros., Ltd., Toronto.
GLASS FOR BUILDINGS
Toronto Plate Glass Importing Co., Ltd., Toronto, Ont.
GLASS BENDERS
Toronto Plate Glass Importing Co., Ltd., Toronto, Ont.
GLASS, mirror
Toronto Plate Glass Importing Co., Ltd., Toronto, Ont.
GLOVES AND MITTS
*A. R. Clarke & Co., Ltd., Toronto.
Craig, Cowan Co., Ltd., Toronto.
GLUE
Canada Glue Co., Ltd., Brantford, Ont.
GOLD-FILLED WIRE AND PLATE
Canadian Seamless Wire Co., Toronto, Ont.
GOLD AND SILVER REFINERS
Canadian Seamless Wire Co., Toronto, Ont.
GRAIN CRUSHERS, rapid, easy
J. Fleury's Sons, Aurora, Ont.
GRAPE JUICE
J. J. McLaughlin, Ltd., Toronto.
The Welch Co., Ltd., St. Catharines, Ont.
GRAPHITE, lubricating
Black Donald Graphite Company, Limited, Calabogie, Ont.
GRATES
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
GRAVITY CARRIERS
*Canadian Mathews Gravity Carrier Co., Toronto, Ont.
GRILLES, metal
*Canada Wire & Iron Goods Co., Hamilton, Ont.
*Dennis Wire & Iron Works Co., London, Ont.
GRINDING MACHINERY
*Ford Smith Machine Co., Ltd., Hamilton, Ont.
*Norton Company of Canada, Ltd., Hamilton, Ont.
GRINDING AND POLISHING MACHINERY
*Canadian Hart Wheels, Ltd., Hamilton, Ont.
GRINDING WHEELS
*Canadian Hart Wheels, Ltd., Hamilton, Ont.
*Norton Company of Canada, Ltd., Hamilton, Ont.
*The Dominion Abrasive Wheel Co., Ltd., New Toronto, Ont.
GRINDSTONES
*Richards-Wilcox Canadian Co., Ltd., London, Ont.
GUNN SECTIONAL BOOKCASES
The Geo. McLagan Furniture Co., Ltd., Stratford, Ont.
GUY ANCHORS
B. J. Coghlin Co., Ltd., Montreal.
GYPSUM PRODUCTS
De Laval Dairy Supply Co., Ltd., Peterboro, Ont.
HACK SAW BLADES AND FRAMES
*E. C. Atkins & Co., Inc., Hamilton, Ont.
HACK SAW MACHINES
*E. C. Atkins & Co., Inc., Hamilton, Ont.
HALL FURNITURE
The Geo. McLagan Furniture Co., Ltd., Stratford, Ont.
HANDLES (axe, pick, sledge hammers, etc.)
The Lachute Shuttle Co., Ltd., Lachute Mills, P.Q.
HANDLES, wood
Canada Spool & Bobbin Co., Ltd., Walkerton, Ont.
HAND SAWS
*E. C. Atkins & Co., Inc., Hamilton, Ont.
HANGERS
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
HARDWARE
*Richards-Wilcox Canadian Co., Ltd., London, Ont.
Taylor-Forbes Co., Ltd., Guelph, Ont.
HARNESS
Lamontagne, Ltd., Montreal, Que.
HATS, ladies' felt and straw
Toronto Hat Mfg. Co., Toronto.
HAULAGE, wire rope
*The Dominion Wire Rope Co. Ltd., Montreal, Que.
HEADING SAWS
*E. C. Atkins & Co., Inc., Hamilton, Ont.
HEATERS
*Waterous Engine Works Co., Ltd., Brantford, Ont.
HEATERS, feed water
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
HEATERS, WATER FEED
*Mason Regulator & Engineering Co., Ltd., Montreal, Que.
HEATING APPLIANCES
*C. A. Dunham Co., Ltd., Toronto.
*The Canadian Blower & Forge Co., Ltd., Kitchener, Ont.
HEATING SYSTEMS
*C. A. Dunham Co., Ltd., Toronto.
HEMLOCK, union and oak sole
Breithaupt Leather Co., Ltd., Kitchener, Ont.
HESSIANS
The Canadian Bag Co., Ltd., Montreal, Que.
HINGES
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
HOISTS, electric and pneumatic
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.
*Canadian Mead Morrison Co Ltd., Montreal, Que.
*Northern Crane Works, Ltd., Walkerville, Ont.
HOSE, fire and rubber
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
*Gutta Percha & Rubber, Ltd., Toronto, Ont.
HOUSES, factory made
Wm. H. White, Ville St. Pierre, Montreal, Que.
HYDRAULIC TURBINES
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.
ICE CREEPERS
Parmenter & Bulloch Co., Ltd., Gananoque, Ont.
ICE MACHINE EQUIPMENT
Canadian Ice Machine Co., Limited, Toronto, Ont.
ICE-MAKING MACHINERY
The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.
INGOT METALS
*Brown's Copper & Brass Rolling Mills, Ltd., New Toronto, Ont.
INSERTED TOOTH SAWS
*E. C. Atkins & Co., Inc., Hamilton, Ont.
INSULATING COMPOUNDS
*The Imperial Varnish & Color Co., Ltd., Toronto.
INSULATION VULCANIZED FIBRE
*The Diamond State Fibre Co. of Canada, Ltd., Toronto.
INTERLOCKING RUBBER TILING
*Gutta Percha & Rubber Mfg. Co., of Toronto, Ltd., Toronto, Ont.
IRON
*Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.
IRON AND STEEL BARS
*Burlington Steel Co., Ltd., Hamilton, Ont.
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
IRON STAIRWAYS
*Canada Wire & Iron Goods Co., Hamilton, Ont.
*Dennis Wire & Iron Works Co., London, Ont.
*McGregor & McIntyre, Ltd., Toronto, Ont.
IRONWORK, architectural
*Canada Wire & Iron Goods Co., Hamilton, Ont.
IRONWORK, ornamental
*Canada Wire & Iron Goods Co., Hamilton, Ont.
INDUSTRIAL DESIGN PATENTS
Harold C. Shipman & Co., Ottawa, Ont.
JAM, canned goods, etc.
E. D. Smith & Son, Ltd.
JAPANS, enamels, etc.
Berry Brothers, Inc., Walkerville, Ont.
A. Muirhead Co., Ltd., Toronto.
*The Imperial Varnish & Color Co., Ltd., Toronto, Ont.

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JELLY POWDER
S. H. Ewing & Sons, Montreal
JEWELRY, enamelled souvenir
*Caron Bros., Montreal, Que.
JEWELRY, gold-filled
*Caron Bros., Montreal, Que.
JOINTERS
*Canada Machinery Corporation, Ltd., Galt, Ont.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.
JOIST HANGERS
*Richards-Wilcox Canadian Co Ltd., London, Ont.
JUNCTION BOXES, cable
*Standard Underground Cable Co of Canada, Ltd., Hamilton, Ont
KINDLING
Standard Fuel Co., Toronto, Ont.
KNIFE GRINDERS
*Canada Machinery Corporation. Ltd., Galt, Ont.
KNITTED GOODS
*Penman's, Ltd., Paris, Ont.
KNIVES
*Galt Knife Co., Ltd.
The Peter Hay Knife Co., Ltd., Galt, Ont.
Simonds Canada Saw Co., Ltd., Montreal, Que.
KNIVES, pulp and paper
Henry Disston & Sons, Toronto.
The Peter Hay Knife Co., Ltd., Galt, Ont.
KODAKS AND PHOTOGRAPHIC SUPPLIES
Canadian Kodak Co., Ltd., Toronto.
LABELS
Lawson & Jones, Ltd., London Ont.
LABELS, lithographed
Consolidated Lithographing and Mfg. Co., Ltd., Montreal, Que.
Harris Lithographing Co., Ltd Toronto, Ont.
LABORATORY SUPPLIES
Canadian Laboratory Supplies Ltd., Toronto.
LACE LEATHER
F. C. McCordick, St. Catharines Ont.
*The D. K. McLaren Belting Co Ltd., Montreal, Que.
*The J. C. McLaren Belting Co. Ltd., Montreal, Que.
LADDERS
Stratford Mfg. Co., Ltd., Stratford, Ont.
LADLES, foundry
*Northern Crane Works, Ltd. Walkerville, Ont.
LAMPS, Gasoline, Vapor.
Coleman Lamp Company, Ltd., Toronto.
LATH
The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.
LATHE CHUCKS
*Ker & Goodwin, Brantford, Ont
LATHES
*Canada Machinery Corporation Ltd., Galt, Ont.
LAUNCHES
Peterboro Canoe Co., Ltd., Peterboro, Ont.
LAWN MOWERS
Taylor-Forbes Co., Ltd., Guelph Ont.
LAWN SWINGS
Stratford Mfg. Co., Ltd., Stratford, Ont.
LAVATORIES, enameled
Amherst Foundry Co., Ltd., Amherst, N.S.
LAMPS (ELECTRIC)
The Dalyte Electric Limited, Guelph, Ont.
LAUNDRY SINKS
Amherst Foundry Co., Ltd., Amherst, N.S.
LEAD
*Consolidated Mining & Smelting Co. of Canada, Ltd., Montreal
LEAD GRINDERS
Benjamin Moore & Co., Ltd., Toronto, Ont.
LEAD PIPE
*Hoyt Metal Co., Toronto, Ont.
*The Steel Co. of Canada, Ltd. Hamilton, Ont.
Toronto Plate Glass Importing Co., Ltd., Toronto, Ont.
*The Canada Metal Co., Toronto.
LEAD SHEET
Toronto Plate Glass Importing Co., Ltd., Toronto, Ont.
LEATHER
The Robson Leather Co., Ltd., Oshawa, Ont.
LEATHER, bookbinders'
Clarke & Clarke, Ltd., Toronto
LEATHER, fancy
Clarke & Clarke, Ltd., Toronto.
LEATHER GOODS
Lamontagne, Ltd., Montreal, Que
LEATHER GOODS, Fine
Federated Leather Goods Co., Ltd., Montreal, Que.
Canadian Leather Products, Ltd., Toronto, Ont.
LEATHER, hemlock, union and oak sole
The Breithaupt Leather Co., Ltd., Kitchener, Ont.
LEATHER, patent colt and side leather
*A. R. Clarke & Co., Ltd., Toronto
LEATHER, sheep skin, etc.
Clarke & Clarke, Ltd., Toronto.
LEATHER, upholstering
Clarke & Clarke, Ltd., Toronto.
LEATHER, upper
A. Davis & Son., Ltd., Kingston, Ont.
King Brothers Co., Ltd., Whitby Ont.
LINK-BELT, Ewart and saw mill riveted
*Canadian Link-Belt Co., Toronto
LINOLEUM
Dominion Oil Cloth and Linoleum Co., Ltd., Montreal, Que.
LITHOGRAPHERS
American Bank Note Co., Ottawa, Ont.
Consolidated Lithographing and Mfg. Co., Ltd., Montreal, Que.
Harris Lithographing Co., Ltd. Toronto, Ont.
The Federated Press, Limited, Montreal, Que.
LOCKERS
*Canada Wire & Iron Goods Co. Hamilton, Ont.
*Dennis Wire & Iron Works Co. London, Ont.
*Geo. B. Meadows, Wire, Iron and Brass Works Co., Toronto. Ont
LOCOMOTIVES, industrial
*Montreal Locomotive Works, Ltd. Montreal, Que.
LOCOMOTIVE & MARINE BRASS WORKS
The James Morrison Brass Mfg Co., Ltd., Toronto.
LOOSE LEAF SYSTEMS
Copeland-Chatterson Co., Ltd. Brampton, Ont.
LUBRICATING FLAKE GRAPHITE
Black Donald Graphite Company Limited, Calabogie, Ont.
LUGS, for silos and water tanks
*Ontario Wind Engine & Pump Co., Ltd., Toronto.
LUMBER
The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.
LUMBER, asbestos
*Eureka Mineral Wool & Asbestos Co., Toronto, Ont.
LUMBER, spruce and pine, cedar railway ties and shingles
*Bathurst Lumber Co., Ltd., Bathurst, N.B.
LUMBER, red pine and spruce
Gillies Bros., Ltd., Braeside, Ont
LUMBER, White pine
Gillies Bros., Ltd Braeside, Ont
LUMBERING BLANKETS
Slingsby Mfg. Co., Ltd., Brantford Ont.
MACHINE DESIGNING.
Harold C. Shipman & Co., Ottawa, Ont.
MACHINE KNIVES
*Galt Knife Co., Ltd.
*E. C. Atkins & Co., Inc., Hamilton, Ont.
Henry Disston & Sons, Toronto.
MACHINE TOOLS
*Canada Machinery Corporation, Ltd., Galt, Ont.
*John Bertram & Sons Co., Ltd., Dundas, Ont.
MACHINE WORK, special and repairs
*Canadian Rumely Co., Ltd., Toronto, Ont.
MACHINERY, special, designing and developing.
Larsen & Shaw, Ltd., Walkerton.
MACHINERY AND UTENSILS FOR BAKERS
Fletcher Mfg. Co., Ltd., Toronto.
MACHINERY AND UTENSILS FOR CANDY
Fletcher Mfg. Co., Ltd., Toronto.
MACHINERY AND UTENSILS FOR ICE CREAM
Fletcher Mfg. Co., Ltd., Toronto.
MACHINERY, Conveying
*Canadian Link-Belt Company, Ltd., Toronto, Ont.
*Canadian Mathews Gravity Carrier Co., Ltd., Toronto.
MACHINERY, flour mill
*Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
MACHINERY, ice cream
J. J. McLaughlin, Ltd., Toronto.
MACHINERY, grinding
*Canadian Hart Wheels, Ltd., Hamilton, Ont.
*Canadian Mead Morrison Co., Ltd., Montreal, Que.
J. & R. Weir, Montreal, Que.
*Northern Crane Works, Ltd., Walkerville, Ont.
MACHINERY, iron working
*Canada Machinery Corporation, Ltd., Galt, Ont.
*John Bertram & Sons Co., Ltd., Dundas, Ont.
MACHINERY, pulp mill
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.
*Dominion Engineering Works, Limited, Montreal, Que.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.
MACHINERY, punching and shearing
*Canada Machinery Corporation, Ltd., Galt, Ont.
*John Bertram & Sons Co., Ltd., Dundas, Ont.
MACHINERY, railroad and car-shop
*Canada Machinery Corporation, Ltd., Galt, Ont.
*John Bertram & Sons Co., Ltd., Dundas, Ont.
MACHINERY, roadmaking
Sawyer-Massey Co., Ltd., Hamilton, Ont.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.
MACHINERY, sawmill
The E. Long Mfg. Co., Ltd., Orillia, Ont.
P. Payette & Co., Pentanguishene, Ont.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.
*Yates, P. B., Machine Co., Ltd., Hamilton, Ont.
MACHINERY, sheet metal working
*Canada Machinery Corporation, Ltd., Galt, Ont.
MACHINERY, woodworking
*Canada Machinery Corporation, Ltd., Galt, Ont.
*Yates, P. B., Machine Co., Ltd., Hamilton, Ont.
Preston Woodworking Machinery Co., Ltd., Preston, Ont.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.
MAGNESITE
*Canadian Carbonate Co., Montreal, Que.
MALLEABLE IRON CASTINGS
Malleable Castings Co., Ltd., Smith's Falls, Ont.
*Galt Malleable Iron Co., Ltd., Galt, Ont.
MATCHERS
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.
MATCHES
*The E. B. Eddy Co., Ltd., Hull, Que.
MECHANICAL STOKERS
*Under-feed Stoker Co. of Canada, Ltd., Toronto.
METAL, babbitt
Alonzo W. Spooner, Ltd., Port Hope, Ont.
*Canada Metal Co., Toronto, Ont.
METAL CEILINGS
*The Pedlar People, Ltd., Oshawa, Ont.
*The A. B. Ormsby Co., Ltd., Toronto, Ont.
METAL LATH
*The Pedlar People, Ltd., Oshawa, Ont.
METAL LATH
*Trussed Concrete Steel Company of Canada, Ltd., Walkerville, Ont.
METAL PACKING
*Garlock Packing Co., Hamilton, Ont.
METAL, spinning and stamping
*The Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.
METAL PROTECTIVE PAINTS
Sturgeons Limited, Toronto.
METAL SAWS
*E. C. Atkins & Co., Inc., Hamilton, Ont.
METAL SHINGLES
*The Pedlar People, Ltd., Oshawa, Ont.
*The A. B. Ormsby Co., Ltd., Toronto, Ont.
METAL STAMPING
W. H. Banfield & Sons, Toronto.
MILK DEALERS' MACHINERY AND SUPPLIES
De Laval Dairy Supply Co., Ltd., Peterboro, Ont.
MILLBOARD, asbestos
*Eureka Mineral Wool & Asbestos Co., Toronto.
MILLING CUTTERS
*Pratt & Whitney Co. of Canada, Dundas, Ont.
MILLING MACHINES
*Ford Smith Machine Co., Ltd., Hamilton, Ont.
MILL RIVITED
*Canadian Link-Belt Company, Ltd., Toronto, Ont.
MITTS AND GLOVES, Indian, tan, red deerskins
Holt, Renfrew, Ltd., Quebec, Que.
*A. R. Clarke & Co., Ltd., Toronto.
MIXERS, chocolate, dough and paint
Fletcher Mfg. Co., Ltd., Toronto.
MOCCASINS AND SLIPPERS, Indian tanned leathers
Holt, Renfrew, Ltd., Quebec, Que.
MONEL METAL
*International Nickel Co. of Canada, Ltd., Toronto.
MORTISERS
*Canada Machinery Corporation, Ltd., Galt, Ont.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.
MOTION PICTURES
Pathescope of Canada, Limited, Toronto.
Filmcraft Industries, Limited, Toronto, Ont.
MOTOR CARS
*Ford Co. of Canada, Ford, Ont.
MOTORS, electric (alternating current)
*Canadian Westinghouse Co., Ltd., Hamilton, Ont.
*Jones & Moore Electric Co., Ltd., Toronto, Ont.
*Canadian Crocker-Wheeler Co., Ltd., St. Catharines, Ont.
*T. & H. Electric Co., Hamilton, Ont.
MOTORS, electric (direct current)
*Canadian Westinghouse Co., Ltd., Hamilton, Ont.
*Jones & Moore Electric Co., Ltd., Toronto, Ont.
*T. & H. Electric Co., Hamilton.
MOTORS, electric (repairing)
*T. & H. Electric Co., Hamilton
MOTOR TRUCKS
Maple Leaf Manufacturing Company, Ltd., Montreal Que.
MOULDERS
*Canada Machinery Corporation, Ltd., Galt, Ont.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.
NAILS
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
NAILS, copper
Parmenter & Bullock Co., Ltd, Gananoque, Ont.
NAILS, wire
Parmenter & Bullock Co., Ltd. Gananoque, Ont.
NAILS.
*Laidlaw Bale Tie Co., Ltd., Hamilton, Ont.

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NAPHTHA
*The Imperial Oil Co., Ltd., Toronto, Ont.
NICKEL CASTINGS
*International Nickel Co. of Canada, Ltd., Toronto.
NICKEL METAL
*Deloro Smelting & Refining Co., Ltd., Deloro, Ont.
*International Nickel Co. of Canada, Ltd., Toronto.
NICKEL OXIDE
*Deloro Smelting & Refining Co., Ltd., Deloro, Ont.
Coniagas Reduction Co., Ltd., St. Catharines, Ont.
*International Nickel Co. of Canada, Ltd., Toronto.
NUTS
*John Morrow Screw & Nut Co., Ltd., Ingersoll, Ont.
*The National Acme Mfg. Co., Montreal, Que.
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
OAKUM, plumbers, Canadian Navy
Factory Waste & Metal Co., Montreal, Que.
OAT CRUSHERS AND FLAKERS
J. Fleury's Sons, Aurora, Ont.
OFFICE CHAIRS, Etc.
The Macey Office Equipment Co., Toronto.
OFFICE DESKS
*Goderich Organ Co., Goderich, Ont
OFFICE EQUIPMENT
*Office Specialty Co., Newmarket Ont.
OFFICE FURNITURE
*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.
OILS
*A. Ramsay & Son Co., Montreal Que.
OIL FILTRATION AND CIRCULATING SYSTEMS
*S. F. Bowser & Co., Toronto, Ont
OIL STORAGE SYSTEMS, self-measuring
*S. F. Bowser & Co., Toronto, Ont
OIL COMPANIES
*Canadian Oil Cos., Toronto.
Commercial Oil Co., Ltd., Hamilton, Ont.
*Imperial Oil Co., Toronto.
OILS (petroleum products)
*British American Oil Co., Ltd. Toronto, Ont.
*The Imperial Oil Co., Toronto.
OILS, road
*The Barrett Co., Ltd., Toronto and Montreal.
OILCLOTHS, floor and table
Dominion Oil Cloth and Linoleum Co., Ltd., Montreal, Que.
ORGANS
Casavant Freres, Limitee, St. Hyacinthe, Que.
*Goderich Organ Co., Goderich, Ont.
ORGANS, parlor
*Goderich Organ Co., Goderich, Ont
ORGANS, pipe
Casavant Freres, Limitee, St. Hyacinthe, Que.
ORGANS, reed
Bell Piano & Organ Co., Ltd., Guelph, Ont.
ORNAMENTAL IRON WORK
*Canada Wire & Iron Goods Co., Hamilton, Ont.
*Dennis Wire & Iron Works Co., London, Ont.
*The Geo. B. Meadows, Toronto Iron & Brass Goods Works Co., Ltd., Toronto, Ont.
*McGregor & McIntyre, Ltd., Toronto, Ont.
OVERALLS
Peerless Overall Co., Rock Island, Que.
Walker Pant & Shirt Co., Walkerville and Chatham, Ont.
OVERCOATINGS
Rosamond Woollen Co., Almonte, Ont.
OVERHEAD RUNWAYS
*MacKinnon Steel Co., Ltd., Sherbrooke, Que.
*Richards-Wilcox Canadian Co Ltd., London, Ont.
OXY-ACETYLENE WELDING
*L'Air Liquide Society, Montreal, Que.
*The Prest-O-Lite Co., Inc., Toronto
OXYGEN
Dominion Oxygen Co., Ltd., Toronto.
*L'Air Liquide Society, Montreal, Que.
PACKING BOXES
Barchard & Co., Ltd., Toronto.
PACKING, engine
*Garlock Packing Co., Hamilton, Ont.
PACKING, Metallic-Flexible
Beveridge Supply Co., Ltd., Montreal, Que.
PACKING, rubber
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
*Gutta Percha & Rubber Mfg. Co. of Toronto, Ltd.
*Jenkins Bros., Ltd., Montreal, Que.
PAD HOOKS
Parmenter & Bulloch Co., Ltd., Gananoque, Ont.
PAILS AND TUBS, wooden
The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.
PAINTERS' SUPPLIES
A. Muirhead Co., Ltd., Toronto.
PAINTING MACHINES
Spramotor Company, London, Ont.
PAINTS AND VARNISHES
Berry Brothers, Inc., Walkerville, Ont.
A. Muirhead Co., Ltd., Toronto.
Benjamin Moore & Co., Ltd., Toronto, Ont.
Dominion Paint Works, Limited, Walkerville, Ont.
*The Imperial Varnish & Color Co., Ltd., Toronto, Ont.
The Staneland Co., Ltd., Victoria, B.C.
*A Ramsay & Sons Co., Montreal, Que.
Standard Paint Co. of Canada, Ltd., Montreal, Que.
PAINTS, preservative
Dominion Paint Works, Limited, Walkerville, Ont.
Standard Paint Co. of Canada, Ltd., Montreal, Que.
*The Barrett Co., Ltd., Toronto and Montreal.
PAPER BOARDS & BAGS
Beveridge Supply Co., Ltd., Montreal, Que.
PAPER BOXES
Standard Paper Box Company, Ltd., Montreal, Que.
King Paper Box Co., Ltd., Montreal, Que.
PAPER, coated, book and label
*Provincial Paper Mills, Ltd., Georgetown, Ont.
PAPER, coated box board
*Provincial Paper Mills, Ltd., Georgetown, Ont.
PAPER, coated cover
*Provincial Paper Mills, Ltd., Georgetown, Ont.
PAPER, envelope
*Provincial Paper Mills, Ltd., Georgetown, Ont.
The Toronto Paper Mfg. Co., Cornwall, Ont.
PAPER, enamelled blotting
*Provincial Paper Mills, Ltd., Georgetown, Ont.
PAPER, label
*Provincial Paper Mills, Ltd., Georgetown, Ont.
PAPER, ledger
*Howard Smith Paper Mills, Ltd., Montreal, Que.
*Rolland Paper Co., Ltd., Montreal, Que.
The Toronto Paper Mfg. Co., Cornwall, Ont.
PAPER, super-book
The Toronto Paper Mfg. Co., Cornwall, Ont.
PAPER, writing
The Toronto Paper Mfg. Co., Cornwall, Ont.
*Howard Smith Paper Mills, Ltd., Montreal, Que.
*Rolland Paper Co., Ltd., Montreal, Que.
PAPERS, bond
*Howard Smith Paper Mills, Ltd., Montreal, Que.
*Rolland Paper Co., Ltd., Montreal, Que.
PAPERS, building
*Bathurst Lumber Co., Ltd., Bathurst, N.B.
*The Riordon Pulp & Paper Co., Montreal, Que.
Standard Paint Co. of Canada, Ltd., Montreal, Que.
PARLOR SUNDRIES
The Geo. McLagan Furniture Co., Ltd., Stratford, Ont.
PATENTS
Fetherstonhaugh & Co., Toronto.
*Ridout & Maybee, Toronto, Ont.
*Harold C. Shipman & Co., Ottawa.
PATENT LITIGATION
*Ridout & Maybee, Toronto, Ont.
*Harold C. Shipman & Co., Ottawa, Ont.
PAVING MATERIAL
*Trussed Concrete Steel Company of Canada, Ltd., Walkerville, Ont.
PAY ROLL AUDITS
*International Business Machines, Ltd., Toronto, Ont.
PERFORATED METALS
*Canada Wire & Iron Goods Co., Hamilton, Ont.
PERFORATED MUSIC ROLLS
The Otto Higel Co., Ltd., Toronto.
PERFUMES AND TOILET PREPARATIONS
Sovereign Perfumes, Ltd., Toronto.
PETROLEUM PRODUCTS
*The Imperial Oil Co., Ltd., Toronto, Ont.
PHONOGRAPH MOTORS
W. H. Banfield & Sons, Toronto.
PHOTO MAILERS
*Thompson & Norris Co., of Canada, Ltd., Toronto and Montreal.
PIANO ACTIONS
The Otto Higel Co., Ltd., Toronto.
PIANO KEYS
The Otto Higel Co., Ltd., Toronto.
PIANO, player actions
The Otto Higel Co., Ltd., Toronto.
PIANOS AND PLAYER PIANOS
Bell Piano & Organ Co., Ltd., Guelph, Ont.
PIANO STOOLS AND BENCHES
*Goderich Organ Co., Goderich, Ont.
PIG IRON
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
*M. A. Hanna & Co., Toronto.
*Algoma Steel Corporation.
PINS, society, emblems and badges
*Caron Bros., Montreal, Que.
PIPE, cast iron, for water and gas
National Iron Works, Ltd., Toronto, Ont.
PIPE COUPLINGS
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
PIPE COVERINGS
*Eureka Mineral Wood & Asbestos Co., Toronto, Ont.
PIPES, culvert
*The Pedlar People, Ltd., Oshawa, Ont.
PIPE AND NIPPLES, black and galvanized
*Canadian Tube & Iron Co., Ltd., Montreal, Que.
PIPE, sewer
Hamilton & Toronto Sewer Pipe Co., Ltd., Hamilton, Ont.
PIPE, soil and fittings
Anthes Foundry, Ltd., Toronto and Winnipeg.
Warden King Ltd., Montreal, Que.
PISTON RODS
*The Canadian Drawn Steel Co., Ltd., Hamilton, Ont.
*Union Drawn Steel Co., Ltd., Hamilton, Ont.
PLANERS
*Canada Machinery Corporation, Ltd., Galt, Ont.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.
PLASTERING TROWELS
*E. C. Atkins & Co., Inc., Hamilton, Ont.
PLOWS
J. Fleury's Sons, Aurora, Ont.
PNEUMATIC DRILLS
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.
PLUMBERS' SUPPLIES
The Garth Co., Montreal, Que.
The James Morrison Brass Mfg. Co., Ltd., Toronto, Ont.
Toronto Plate Glass Importing Co., Ltd., Toronto, Ont.
POLE LINE MATERIAL (wooden insulator top pins, side blocks, pole steps, cross arms)
The Lachute Shuttle Co., Ltd., Lachute Mills, P.Q.
POLES, flag
*Ontario Wind Engine & Pump Co., Ltd., Toronto, Ont.
POLISHING MACHINERY
*Ford Smith Machine Co., Ltd., Hamilton, Ont.
PORK PACKERS AND CHEESE EXPORTERS
The Ingersoll Packing Co., Ltd., Ingersoll, Ont.
POWDER, blasting
Canadian Explosives, Ltd., Montreal, Que.
POWER TRANSMISSION MACHINERY
Dodge Manufacturing Co. of Canada, Ltd., Toronto.
POWER PRESSES
*Hydraulic Machinery Co., Ltd., Montreal, Que.
PRESSES, hydraulic
*The Hydraulic Machinery Co., Limited, Montreal.
PRESSES, sheet metal stamping
*Canada Machinery Corporation, Ltd., Galt, Ont.
PRESSES, veneer
*Canada Machinery Corporation, Ltd., Galt, Ont.
PRINTING AND LITHOGRAPHING
Lawson & Jones, Ltd., London, Ont.
The Federated Press, Limited, Montreal, Que.
PRINTING & LITHOGRAPHIC INKS.
Charles Bush, Limited, Toronto.
PULLEYS
*Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
PULLEYS, Fibre
*The Diamond State Fibre Co. of Canada, Ltd., Toronto.
PULLEYS, wood split
*Bernard Industrial Co., Fortierville, P.Q.
PULLEYS, Wood Split, Iron and steel.
Dodge Manufacturing Co. of Canada, Ltd., Toronto.
PULP, bleached sulphite
*Riordan Sales Co., Ltd., Montreal,
PULP, unbleached sulphite
*Riordan Sales Co., Ltd., Montreal,
PULP, sulphate and sulphite
*Bathurst Lumber Co., Ltd., Bathurst, N.B.
PULP AND PAPER MILL MACHINERY
*The Hydraulic Machinery Co., Limited, Montreal.
PUMPS
Aylmer Pump & Scale Co., Aylmer, Ont.
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.
*Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
*E. Leonard & Sons, Ltd., London, Ont.
*Ontario Wind Engine & Pump Co., Ltd., Toronto, Ont.
*Smart-Turner Machine Co., Ltd., Hamilton, Ort.
*The Electric Steel & Metals Co., Ltd., Welland, Ont.
PUMPS, boiler feed
*Smart-Turner Machine Co., Ltd., Hamilton, Ont.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
PUMPS, centrifugal
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.
*Canadian Mead Morrison Co., Ltd., Montreal, Que.
*Dominion Engineering Works, Limited, Montreal, Que.
*Dominion Forge & Stamping Co., Ltd., Walkerville, Ont.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Smart-Turner Machine Co., Ltd., Hamilton, Ont.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.

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PUMPS, hydraulic
*The Hydraulic Machinery Co., Limited, Montreal.

PUMPS, turbine and reciprocating
*Smart-Turner Machine Co., Ltd., Hamilton, Ont.

PUNCHES
*Pratt & Whitney Co., Dundas, Ont.

RADIATORS
Taylor-Forbes Co., Ltd., Guelph, Ont.
Warden King, Ltd., Montreal, Que.

RAILS (STEEL).
*Algoma Steel Corporation.

RAILINGS, brass and iron
*Dennis Wire & Iron Works Co., London, Ont.

RAILWAY SUPPLIES
*Canadian Steel Foundries, Ltd., Montreal, Que.
*Chicago Bridge & Iron Works Bridgeburg, Ont.
B. J. Coghlin Co., Ltd., Montreal Que.

READY-TO-WEAR GARMENTS, ladies'
H. C. Boulter Co., Ltd., Toronto.

REAMERS
*Pratt & Whitney Co., Dundas, Ont
*Butterfield & Co., Rock Island. P.Q.

RECEPTACLES, fibre
*The Diamond State Fibre Co. of Canada, Ltd., Toronto.

REFRIGERATORS
Sanderson-Harold Co., Ltd., Paris Ont.

REFRIGERATING MACHINERY
The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.

REFRIGERATING EQUIPMENT.
Canadian Ice Machine Co., Ltd., Toronto, Ont.

REFRIGERATORS, store, homes and institutions
Ham & Nott Co., Ltd., Brantford, Ont.
*John Hillock & Co., Ltd., Toronto.

REINFORCEMENT BARS
*Burlington Steel Co., Ltd., Hamilton, Ont.
*The Steel Co. of Canada, Ltd., Hamilton, Ont.

REINFORCED CONCRETE
*Trussed Concrete Steel Company of Canada, Ltd., Walkerville, Ont.

REINFORCEMENT FOR CONCRETE
*Canada Wire & Iron Goods Co., Hamilton, Ont.

REINFORCEMENT FOR CONCRETE ROOFING, metal
*The Pedlar People, Ltd., Oshawa, Ont.

REVOLVING DOORS
*A. B. Ormsby Co., Ltd., Toronto

RINGS, gold
*Caron Bros., Montreal, Que.

RIVETS
*Canadian Tube & Iron Co., Ltd. Montreal, Que.
*The Steel Co. of Canada, Ltd. Hamilton, Ont.

RIVETS, bifurcated and tubular
Parmenter & Bullock Co., Ltd. Gananoque, Ont.

RIVETS AND BURRS, iron, copper and brass
Parmenter & Bullock Co., Ltd. Gananoque, Ont.

ROCK DRILLS
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.

ROLLING STEEL DOORS
*A. B. Ormsby Co., Ltd., Toronto

ROOFING, metal
*A. B. Ormsby Co., Ltd., Toronto.

ROOFINGS, plastic, liquid, rubber
Beveridge Supply Co., Ltd., Montreal, Que.

ROOFING, ready to lay
Standard Paint Co. of Canada, Ltd., Montreal, Que.
*The Barrett Co., Ltd., Toronto and Montreal.

ROOF TRUSSES
*The Canadian Bridge Co., Ltd., Walkerville, Ont.
*Dominion Bridge Co., Ltd., Montreal, Que.

ROPE
*Doon Twines, Limited, Kitchener, Ontario.
*Shurly & Derrett, Ltd., Toronto.

ROPE, cotton
Hamilton Cotton Co., Hamilton Ont.

RUBBER FOOTWEAR
*Gutta Percha & Rubber Ltd., Toronto, Ont.
The Miner Rubber Co., Ltd., Grandy, Que.
Ames—Holden—McCready, Limited, Montreal, Que.

RUBBER GOODS
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
*Gutta Percha & Rubber Limited, Toronto.
Ames—Holden—McCready, Limited, Montreal, Que.

RUBBER MACHINERY
*The Hydraulic Machinery Co., Limited. Montreal.

RUBBER MACHINERY MAKERS
The Canadian Consolidated Rubber Co., Ltdd., Rubber Machinery Shops, Kitchener, Ont.

RUBBER MILL MACHINERY
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.

RUBBER PACKING
*Garlock Packing Co., Hamilton Ont.

RULES
The Lufkin Rule Co. of Canada Ltd., Windsor, Ont.

SADDLERY HARDWARE
*Dominion Forge & Stamping Co., Walkerville, Ont.

SAFES
*Goldie & McCulloch Co., Ltd. Galt, Ont.

SALT
*Canadian Salt Co., Ltd., Windsor, Ont.
Dominion Salt Co., Ltd., Sarnia, Ont.

SAMPLE CASES
*The M. Langmuir Mfg. Co., of Toronto, Ltd., Toronto, Ont.

SAND (For all Purposes)
Carrol Brothers, Sherkston, Ont
J. Eveleigh & Co., Ltd., Montreal Que.

SAND RAMMERS
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.

SANITARY PAPER TOWELS
*E. B. Eddy Co., Ltd., Hull, Que.

SASH CORD, cotton
Hamilton Cotton Co., Hamilton, Ont.

SAVE-ALLS
*The Hydraulic Machinery Co., Limited. Montreal.

SAW SHARPENING MACHINERY
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

SAWS
*E. C. Atkins & Co., Ltd., Hamilton, Ont.
Henry Disston & Sons, Ltd., Toronto, Ont.
Shurly & Deitrich, Galt, Ont.

SAWS, cross-cut and band
*Canada Machinery Corporation, Ltd., Galt, Ont.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.
Shurly & Deitrich, Galt, Ont.

SAWS, circular mill
Shurly & Deitrich, Galt, Ont.

SAWS, of all kinds
Simonds Canada Saw Co., Ltd., Montreal, Que.

SAWS, rip
*Canada Machinery Corporation, Ltd., Galt, Ont.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.
Shurly & Deitrich, Galt, Ont.

SAWMILLS
*The Waterous Engine Works Co., Ltd., Brantford, Ont.

SCALES
*Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.

SCREENS
*Canada Wire & Iron Goods Co., Hamilton, Ont.

SCREEN DOORS AND WINDOWS
Sanderson-Harold Co., Ltd., Paris, Ont.
Ham & Nott Co., Ltd., Brantford, Ont.

SCREENS; Folding Draft
The Stratford Mfg. Co., Limited, Stratford, Ont.

SCREWS
*John Morrow Screw & Nut Co., Ltd., Ingersoll, Ont.
*National Acme Company, Montreal, Que.
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
*Torrington Company, Limited, Upper Bedford, Que.

SCREW PLATES
*Butterfield & Co., Rock Island, P.Q.

SEATS; Park and Grand Stand
The Stratford Mfg. Co., Limited, Stratford, Ont.

SECURITIES, engraved
American Bank Note Co., Ottawa, Ont.

SERGES
Rosamond Woollen Co., Almonte, Ont.

SEWAGE DISPOSAL SYSTEMS
Anthes Foundry, Ltd., Toronto.

SEWAGE SCREENS
*The Hydraulic Machinery Co., Limited. Montreal.

SHAFTING
*Canadian Drawn Steel Co., Ltd., Hamilton, Ont.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Union Drawn Steel Co., Ltd., Hamilton, Ont.

SHANTY BLANKETS
Slingsby Mfg. Co., Ltd., Brantford, Ont.

SHAPERS
*Canada Machinery Corporation, Ltd., Galt, Ont.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.

SHEAR BLADES, iron
*Galt Knife Co., Ltd.
The Peter Hay Knife Co., Ltd., Galt, Ont.

SHEATHING
*The Barrett Co., Ltd., Toronto and Montreal.

SHEATHING, asbestos corrugated
*Eureka Mineral Wool & Asbestos Co., Toronto, Ont.
Dodge Manufacturing Co. of Canada, Ltd., Toronto.

SHEET METAL STAMPINGS
Acme Stamping & Tool Works, Ltd., Hamilton, Ont.
*The Pedlar People, Ltd., Oshawa, Ont.
*The A. B. Ormsby Co., Ltd., Toronto, Ont.

SHEETS, fibre
*The Diamond State Fibre Co. of Canada, Ltd., Toronto.

SHEETS, galvanized
*Dominion Sheet Metal Co., Ltd., Hamilton, Ont.
*The Pedlar People, Ltd., Oshawa, Ont.

SHINGLES
*Bathurst Lumber Co., Ltd., Bathurst, N.B.

SHINGLE SAWS
*E. C. Atkins & Co., Inc., Hamilton, Ont.

SHINGLE STAINS
Sturgeons, Limited, Toronto.

SHIP BUILDERS
J. & R. Weir, Montreal, Que.

SHIRTS
John W. Peck & Co., Ltd., Montreal, Que.

SHIRTS, workmen's
*A. R. Clarke & Co., Ltd., Toronto

SHOE PEGWOOD
O. Chalifour, Quebec, Que.

SHOE LININGS
Galt Knitting Co., Ltd., Galt, Ont

SHOOKS
Barchard & Co., Ltd., Toronto.

SIGNAL CELLS-RAILWAY
*Canadian National Carbon Co., Ltd., Toronto.

SILENT CHAIN DRIVES
*Canadian Link-Belt Company, Ltd., Toronto, Ont.

SILVER BULLION
Coniagas Reduction Co., Ltd., St Catharines, Ont.
*Deloro Smelting & Refining Co., Ltd., Deloro, Ont.

SILVERSMITH
Standard Silver Co., Toronto, Ont.

SILVERWARE, sterling
Roden Bros., Ltd., Toronto, Ont.

SINKS, enamelled
Amherst Foundry Co., Ltd., Amherst, N.S.

SKIFFS
Peterboro Canoe Co., Ltd., Peterboro, Ont.

SKYLIGHTS
*A. B. Ormsby Co., Ltd., Toronto.
*The Pedlar People, Ltd., Oshawa, Ont.

SLOTTERS
*Canada Machinery Corporation, Ltd., Galt, Ont.

SMOKE CONSUMERS
*Under-Feed Stoker Company of Canada, Limited, Toronto.

SMOKE-STACKS
*Canadian Chicago Bridge & Iron Co., Ltd., Bridgeburg, Ont.
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*E. Leonard & Sons, Limited, London, Ont.
*MacKinnon Steel Co., Ltd., Sherbrooke, Que.
*Steel Trough & Machine Co., Ltd., Tweed, Ont.

SOAPS
J. Barsalou & Co., Ltd., Montreal.

SODA ASH
Brunner, Mond Canada, Limited, Amherstburg, Ont.

SODA WATER FOUNTAINS
J. J. McLaughlin, Ltd., Toronto.

SODA WATER FOUNTAINS AND ACCESSORIES
Fletcher Mfg. Co., Ltd., Toronto.

SOIL PIPE
Anthes Foundry, Ltd., Toronto.

SOLDER
Alonzo W. Spooner, Ltd., Port Hope, Ont.
*Canada Metal Co., Toronto, Ont.
*Hoyt Metal Co., Toronto, Ont.
Magnolia Metal Co. of Canada, Ltd., Montreal, Que.

SOLDER, silver
Geo. H. Lees & Co., Hamilton, Ont.

SOLDER, wire and bar
American Can Co., Montreal, and Hamilton.

SNOWSHOES
Holt, Renfrew, Ltd., Quebec, Que.

SPECIAL MACHINERY
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.

SPECIALTIES, SWAGED AND THREADED WIRE
*Torrington Company, Limited, Upper Bedford, Que.

SPELTER
*Consolidated Mining & Smelting Co. of Canada, Ltd., Montreal.

SPIRAL CONVEYORS
*Canadian Mathews Gravity Carrier Co., Ltd., Toronto, Ont.
Dodge Manufacturing Co. of Canada, Ltd., Toronto.

SPLIT PEAS
H. Murton, Ltd., Guelph, Ont.

SPOOLS
Canada Spool & Bobbin Co., Ltd., Walkerton, Ont.

SPORTING MEDALS AND TROPHIES
Roden Bros., Ltd., Toronto, Ont.

SPRAYERS
Spramotor Co., London, Ont.

SPRING COTTERS
*Richards-Wilcox Canadian Co., Ltd., London, Ont.

SPRINGS
*Canadian Steel Foundries, Ltd., Montreal, Que.
B. J. Coghlin Co., Ltd., Montreal.
Guelph Spring & Axle Co., Ltd., Guelph, Ont.

SPRINGS, carriage and automobile
Guelph Spring & Axle Co., Ltd.,

SPRING SHACKLE BOLTS
*John Morrow Screw & Nut Co., Ltd., Ingersoll, Ont.

*For Display Advertisement see Index, Page 41

SPRINKLER SYSTEMS
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
*The Bennett & Wright Co., Ltd., Toronto, Ont.
*Purdy, Mansell, Ltd., Toronto.

SPROCKET WHEELS
*Canadian Link-Belt Company, Ltd., Toronto, Ont.
Dodge Manufacturing Co. of Can-

STAINS, creosote shingle
A. Muirhead Co., Ltd., Toronto.

STAMPS, steel, brass and rubber
Pritchard-Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

STAMPINGS, steel, brass, aluminum, etc.
Larsen & Shaw, Ltd., Walkerton.

STATIONERY, office
Harris Lithographing Co., Toronto.

STEAM PIPE AND BOILER COVERINGS, asbestos
*Eureka Mineral Wool & Asbestos Co., Toronto.

STEAM SHOVELS
*Canadian Mead Morrison Co., Ltd., Montreal, Que.

STEAM SPECIALTIES
*C. A. Dunham Co., Ltd., Toronto.

STEAM TRAPS
*C. A. Dunham Co., Ltd., Toronto.

STEEL
*Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.
*Burlington Steel Co., Ltd., Hamilton, Ont.
*MacKinnon Steel Co., Ltd., Sherbrooke, Que.

STEEL BILLETS AND BLOOMS
*The Steel Co. of Canada, Ltd., Hamilton, Ont.

STEEL BUILDINGS
*The Canadian Bridge Co., Ltd., Walkerville, Ont.
*Dominion Bridge Co., Ltd., Montreal, Que.
*Hamilton Bridge Works Co., Ltd., Hamilton, Ont.
*Maritime Bridge Co., Ltd., New Glasgow, N.S.
*McGregor & McIntyre, Ltd., Toronto, Ont.
*MacKinnon Steel Co., Limited Sherbrooke, P.Q.
*The Pedlar People, Ltd., Oshawa, Ont.
*The A. B. Ormsby Co., Ltd., Toronto, Ont.

STEEL CASTINGS
Beauchemin & Fils, Ltd., Sorel Que.
*Canadian Steel Foundries, Ltd. Montreal, Que.
*Dominion Foundries and Steel Co., Ltd., Hamilton, Ont.
*Electric Steel & Metals Co., Ltd Welland, Ont.

STEEL DOORS, rolling
*The A. B. Ormsby Co., Ltd., Toronto, Ont.

STEEL FILING EQUIPMENT
*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.

STEEL LATH
*Trussed Concrete Steel Company of Canada, Ltd., Walkerville, Ont.

STEEL PLATE WORK
*Canadian Chicago Bridge & Iron Co., Ltd., Bridgeburg, Ont.
The Canadian Des Moines Steel Co., Ltd., Chatham, Ont.
*Canadian Ingersoll Rand Co., Ltd., Sherbrooke, Que.
*Hamilton Bridge Works Co., Ltd., Hamilton, Ont.
*MacKinnon Steel Co., Limited Sherbrooke, P.Q.
*Toronto Iron Works, Ltd., Toronto

STEEL RODS
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
*Algoma Steel Corporation.

STEEL SASH
*Canadian Metal Window & Steel Products, Limited, Toronto.
*Dennis Wire & Iron Works Co., London, Ont.
*The A. B. Ormsby Co., Ltd., Toronto, Ont.
*Trussed Concrete Steel Company of Canada, Ltd., Walkerville, Ont.

STEEL SHELVING
*Dennis Wire & Iron Works Co. London, Ont.

STEEL WIRE RODS
*The Steel Co. of Canada, Ltd., Hamilton, Ont.

STELLITE
*Deloro Smelting & Refining Co., Ltd., Deloro and Toronto.

STENCILS, brass
Pritchard-Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

STEREOTYPING
Central Press Agency, Toronto.

STOKERS
*Under-feed Stoker Co. of Canada, Ltd., Toronto, Ont.

STOOLS, steel factory
*Steel Trough & Machine Co., Ltd., Tweed, Ont.

STORAGE BATTERIES
*Prest-O-Lite Company of Canada Limited, Toronto.

STORE FITTINGS
The Canadian Office & School Furniture Co., Ltd., Preston, Ont.

STOVES
Smith Foundry Co., Ltd., Frederic ton, N.B.

STOVES AND RANGES
*McClary Mfg. Co., London, Ont.

STRAWS, paper drinking
Fletcher Mfg. Co., Ltd., Toronto

STRUCTURAL STEEL.
*Algoma Steel Corporation.

STRUCTURAL STEEL WORK
*Canadian Ingersoll-Rand Co., Ltd. Sherbrooke, Que.
*Dominion Bridge Co., Montreal.
*Hamilton Bridge Works Co., Ltd. Hamilton, Ont.
*McGregor & McIntyre, Ltd., Toronto, Ont.
*MacKinnon Steel Co., Ltd., Sherbrooke, Que.
*The Canadian Bridge Co., Ltd. Walkerville, Ont.

SUIT CASES
J. Eveleigh & Co., Ltd., Montreal
*The M. Langmuir Mfg. Co., of Toronto. Ltd., Toronto, Ont.

SULPHUR BURNERS
*The Hydraulic Machinery Co Limited, Montreal.

SUPERHEATERS, steam
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

SUPERHEATERS, STEAM (Locomotive, Marine, Stationary)
The Superheater Company, Limited, Transportation Building, Montreal, Quebec.

SUPPLY DEALERS
*The Foundation Co., Ltd., Montreal, Que.

SURFACERS
*Canada Machinery Corporation Ltd., Galt, Ont.
*P. B. Yates Machine Co., Ltd Hamilton, Ont.

SWITCHES, railway
Canadian Ramapo Iron Works Ltd., Niagara Falls, Ont.

SWITCHES AND FROGS
*Canadian Steel Foundries, Ltd. Montreal, Que.

SWITCH STANDS
Canadian Ramapo Iron Works. Ltd., Niagara Falls, Ont.

TABLE COVERS, chenille
Hamilton Cotton Co., Hamilton, Ont.

TANKS
*Canadian Chicago Bridge & Iron Company, Ltd., Bridgeburg, Ont.
*Canadian Des Moines Steel Co., Limited, Chatham.
*Hamilton Bridge Works Co., Ltd., Hamilton, Ont.
*E. Leonard & Sons, Ltd., London, Ont.
*MacKinnon Steel Co., Ltd., Sherbrooke, Que.
*Maritime Bridge Co., Ltd., New Glasgow, N.S.
*Ontario Wind Engine & Pump Co., Ltd., Toronto, Ont.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*The Goold Shapley & Muir Co., Limited, Brantford, Ont.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.
*Toronto Iron Works, Ltd., Toronto.
Wm. H. White, Ville St. Pierre, Montreal, Que.

TANKS, elevated steel
*Canadian Chicago Bridge & Iron Co., Ltd., Bridgeburg, Ont.
*Canadian Des Moines Steel Co Limited, Chatham.

TANKS, steel storage
The Canadian Des Moines Steel Co., Ltd., Chatham, Ont.
*Canadian Ingersoll Rand Co., Ltd., Sherbrooke, Que.
*Canadian Chicago Bridge & Iron Co., Ltd., Bridgeburg, Ont.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*MacKinnon Steel Co., Ltd., Sherbrooke, Que.
*Steel Trough & Machine Co., Ltd., Tweed, Ont.

TANNERS' OILS & GREASES
Salem Oil & Grease Co. of Canada, Limited, Farnham, Que.

TANNERS' SUPPLIES
*McClary Mfg. Co., London, Ont.

TAPS
*Butterfield & Co., Rock Island, P.Q.
*Pratt & Whitney Co., Dundas, Ont.

TAPES, measuring
The Lufkin Rule Co. of Canada, Ltd., Windsor, Ont.

TELEPHONE ACCESSORIES
*Northern Electric Co., Ltd., Montreal, Que.

TERMINALS, electric cable
*Standard Underground Cable Co. of Canada, Ltd., Hamilton, Ont.

TERRA COTTA, architectural
Toronto Plate Glass Importing Co., Ltd., Toronto, Ont.

TEXTILE SUPPLIES (shuttles, bobbins, spools and picker sticks)
The Lachute Shuttle Co., Ltd., Lachute Mills, P.Q.

TIE TAMPERS
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.

TILING, rubber
*Gutta Percha & Rubber Ltd., Toronto, Ont.

TIME RECORDERS
*International Business Machines Co., Ltd., Toronto, Ont.

TINWARE, lithographed
*MacDonald Mfg. Co., Ltd., Toronto, Ont.

TIRES, bicycle, auto, carriage, truck, motorcycle.
*Gutta Percha & Rubber Ltd., Toronto, Ont.

TOOLS, pneumatic
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.

TOOLS, track
B J. Coghlin Co., Ltd., Hamilton.

TOYS AND GAMES.
A. C. Gilbert-Menzies Co., Ltd., Toronto, Ont.

TRADE MARKS AND PATENT INVESTIGATIONS
Harold C. Shipman & Co., Ottawa, Ont.

TRADE MARKS AND DESIGNS
*Ridout & Maybee, Toronto, Ont.

TRAFFIC SERVICES
Guy Tombs Limited, Montreal,, Que.

TRANSFERS, DECALCOMANIA
Canada Decalcomania Co., Ltd., Toronto.

TRANSFORMERS
*The Canadian Crocker-Wheeler Co., Ltd., St. Catharines, Ont.

TRANSLATIONS INTO FRENCH
Raoul Renault, Quebec City.

TRANSMISSION MACHINERY
*Bond Engineering Works., Limited, Toronto.
*Canadian Link Belt Co., Toronto.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.

TRAPS
*C. A. Dunham Co., Ltd., Toronto.

TROLLEYS
*Richard-Wilcox Canadian Co., Ltd., London, Ont.
*Northern Crane Works, Ltd., Walkerville, Ont.

TRUCKS
*Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
*Northern Crane Works, Ltd., Walkerville, Ont.

TRUCKS, brick, tile and lumber
*Waterous Engine Works Co., Ltd., Brantford, Ont.

TRUCKS, motor
Mapleleaf Manufacturing Comp- Ltd., Montreal, Que.
*National Steel Car Co., Ltd., Hamilton, Ont.

TRUCKS FOR OFFICE AND VAULT USE
*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.

TRUNKS
Lamontagne, Ltd., Montreal, Que.
J. Eveleigh & Co., Ltd., Montreal.
*The M. Langmuir Mfg. Co., of Toronto, Ltd., Toronto.

TUBES, ice cream
Fletcher Mfg. Co., Ltd., Toronto.

TUBING, brass and copper
*Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.
Canadian Seamless Wire Co., Toronto, Ont.
*Copper Products, Ltd., Montreal, Que.

TUBING, gold and silver
Canadian Seamless Wire Co., Toronto, Ont.

TUMBLERS, foundry
*Northern Crane Works, Ltd., Walkerville, Ont.
*Smart-Turner Machine Co., Ltd., Hamilton, Ont.

TURBINES, hydraulic
*Dominion Engineering Works, Limited, Montreal, Que.

TURBINES, steam
*The Canadian Crocker-Wheeler Co., Ltd., St. Catharines.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

TURBINE PUMPS
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

TWEEDS
Rosamond Woollen Co., Almonte, Ont.

TWINES
*Doon Twines, Limited, Kitchener, Ontario.
*Shurly & Derrett, Ltd., Toronto.

TWINES, binder
Brantford Cordage Co., Ltd., Brantford, Ont.

TWINES, cotton
Hamilton Cotton Co., Hamilton, Ont.

TWIST DRILLS
*John Morrow Screw & Nut Co., Ltd., Ingersoll.
*Pratt & Whitney Co. of Canada, Dundas, Ont.

UNDERWEAR
Galt Knitting Co., Ltd., Galt, Ont.

UNIONS
*Dart Union Co., Ltd., Toronto.

UPHOLSTERED FURNITURE, leather and tapestries
Imperial Rattan Co., Ltd.

VACUUM PUMPS
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

VALVES
*Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
*Kerr Engine Co., Ltd., Walkerville.
*Jenkins Bros., Ltd., Montreal, Que.

VALVES, for steam and water
*Jenkins Bros., Ltd., Montreal.
James Morrison Brass Mfg. Co., Ltd., Toronto, Ont.

VALVES, REDUCING
*Mason Regulator & Engineering Co., Ltd., Montreal, Que.

VARNISH
Berry Brothers, Inc., Walkerville, Ont.

VAULT FITTINGS, steel
*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.

VAULTS AND VAULT DOORS
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

VENTILATORS
*A. B. Ormsby, Ltd., Toronto, Ont.
*The Pedlar People, Ltd., Oshawa, Ont.

WALLPAPERS
Staunton Limited, Toronto.

WALLBOARD, SHEATHING,
Beveridge Supply Co., Limited, Montreal, Que.

WASHERS
*The Steel Co. of Canada, Ltd., Hamilton, Ont.

WASHERS, fibre
*The Diamond State Fibre Co. of Canada, Ltd., Toronto.

WASHERS, plate or wrought
London Rolling Mill Co., Ltd., London, Ont.

WASTE BASKETS, fibre
*The Diamond State Fibre Co. of Canada, Ltd., Toronto.

WASTES, wool and cotton
Factory Waste & Metal Co., Montreal, Que.

WATERPROOF, cement coating
Benjamin Moore & Co., Ltd., Toronto, Ont.
Beveridge Supply Co., Ltd., Montreal, Que.
*The Barrett Co., Ltd., Toronto and Montreal.

WATERPROOF, caselining
Beveridge Supply Co., Limited, Montreal, Que.

WATER PAINTS
Sturgeons Limited, Toronto.

WEBBING, elastic
Hamilton Cotton Co., Hamilton, Ont.

WEBBING, non-elastic
Hamilton Cotton Co., Hamilton, Ont

WELDING APPARATUS AND MATERIALS
*The Presto-O-Lite Co., Toronto.

WELL-DIGGING TOOLS AND MACHINERY
*Ontario Wind Engine & Pump Co., Ltd., Toronto, Ont.

WHEELS, corundum and emery
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

WELL DRILLING TOOLS AND MACHINERY
Oil Well Supply Co., Ltd., Petrolia, Ont.

WHIPS AND LASHES
Lay Whip Co., Rock Island, Que.

WHITE ARSENIC
Coniagas Reduction Co., Ltd., St. Catharines, Ont.

WHITE LEAD
*A. Ramsay & Son Co., Montreal.

WHITEWASHING MACHINES
Spramotor Company, London, Ont.

WINDMILLS
*Ontario Wind Engine & Pump Co., Ltd., Toronto, Ont.

WINDOW SASH
*Trussed Concrete Steel Company of Canada, Ltd., Walkerville, Ont.

WIRE
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
*Laidlaw Bale-Tie Co., Ltd., Hamilton, Ont.
*Frost Steel & Wire Company, Limited, Hamilton, Ontario.

WIRE BALE TIES
*Frost Steel & Wire Co., Limited, Hamilton, Ontario.
*Laidlaw Bale-Tie Co., Ltd., Hamilton, Ont.

WIRE CLOTH
*Canada Wire & Iron Goods Co., Hamilton, Ont.
*B. Greening Wire Co., Limited, Hamilton, Ont.
*C. H. Johnston & Sons, Ltd., Montreal, Que.

WIRE, feeder and trolley
*Standard Underground Cable Co of Canada, Ltd., Hamilton, Ont.

WIRE GUARDS
*Canada Wire & Iron Goods Co., Hamilton, Ont.
*B. Greening Wire Co., Limited, Hamilton, Ont.
*C. H. Johnson & Sons, Limited, Montreal, Que.

WIRE, insulated electric
*Standard Underground Cable Co of Canada, Ltd., Hamilton, Ont

WIRE ROPE
Canada Wire & Iron Goods Co. Hamilton.
*Dominion Wire Rope Co., Ltd. Montreal, Que.
*The B. Greening Wire Co., Ltd. Hamilton, Ont.

WIRE, weatherproof
*Standard Underground Cable Co of Canada, Ltd., Hamilton, Ont

WIRE WORK
*C. H. Johnson & Sons, Limited Montreal, Que.
*Canada Wire & Iron Goods Co. Hamilton, Ont.
*The Geo. B. Meadows, Toronto Iron & Brass Goods Works Co. Ltd., Toronto, Ont.

WOOD
Standard Fuel Co., Toronto, Ont.

WOOD BORERS
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.
*Canada Machinery Corporation, Ltd., Galt, Ont.

WOOD PRESERVATIVES
Sturgeons Limited, Toronto.

WOOD PRINTERS
Barchard & Co., Ltd., Toronto.

WOOD PULP, mechanical
La Cie de Pulpe de Chicoutimi, Chicoutimi, Que.

WOOD SHOP, general work
*Canadian Rumely Co., Ltd., Toronto, Ont.

WOOD SPLIT PULLEYS
*Dodge Mfg. Co., Ltd., Toronto.

WOOL
*H. V. Andrews, Toronto, Ont.

WOOD TURNING
Canada Spool & Bobbin Co., Ltd., Walkerton, Ont.

WORSTED COATINGS AND SUITINGS
Rosamond Woollen Co., Almonte, Ont.

WRAPPERS, book, bottle, etc.
*Thompson & Norris Co., of Canada, Ltd., Toronto and Montreal.

WROUGHT IRON PIPE
*The Steel Co. of Canada, Ltd., Hamilton, Ont.

YARNS, cotton
Hamilton Cotton Co., Hamilton, Ont.

ZINC
*Consolidated Mining and Smelting Co., of Canada, Ltd., Montreal, Que.

ZINC, electrical
*The Canada Metal Co., Toronto.



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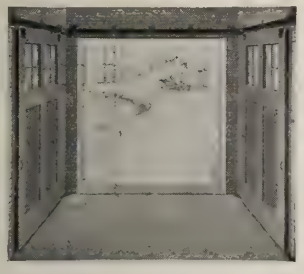


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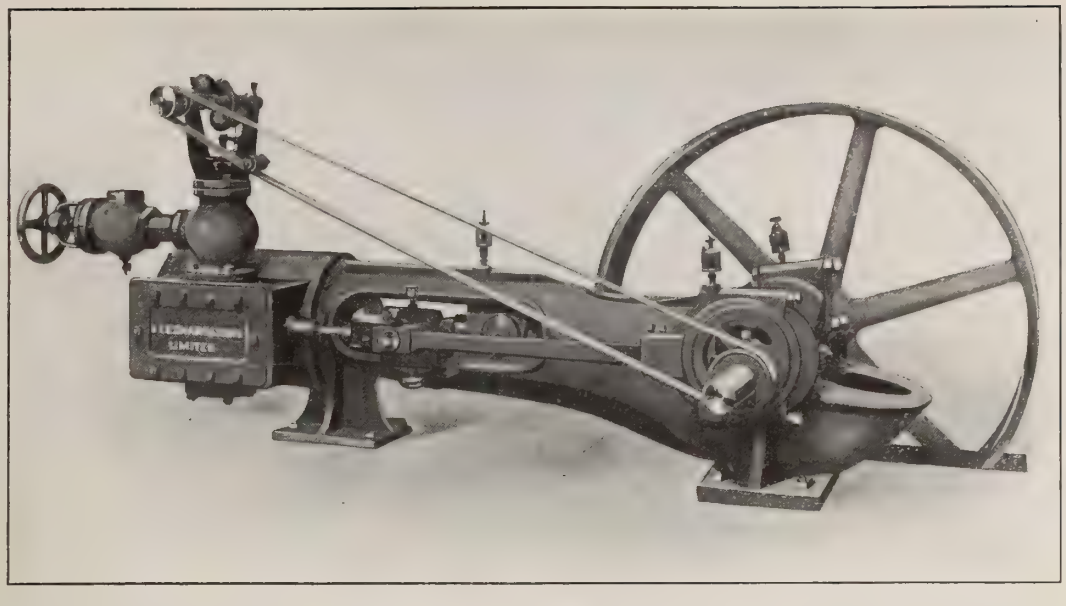
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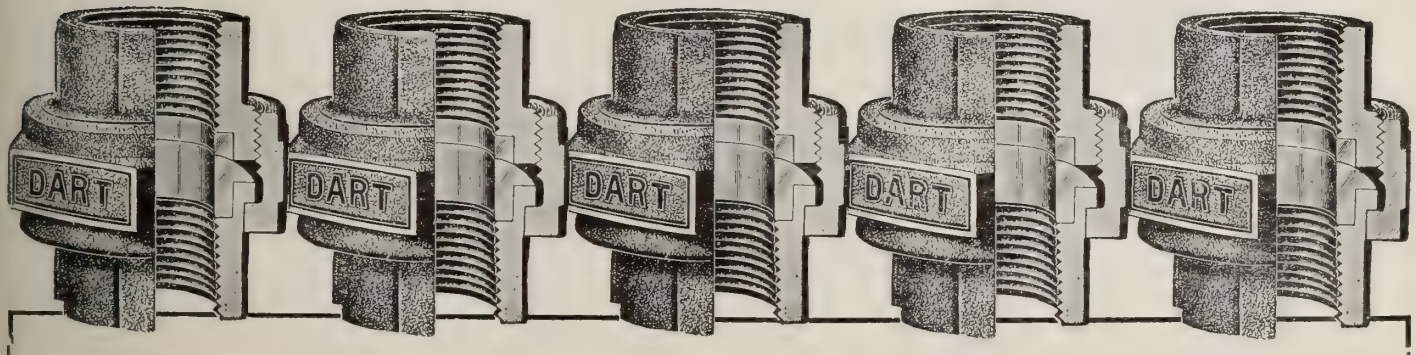
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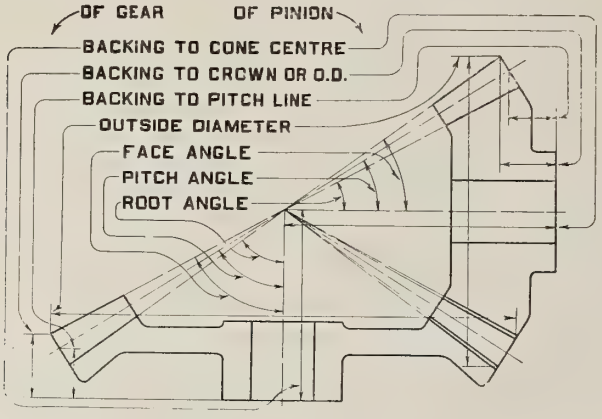




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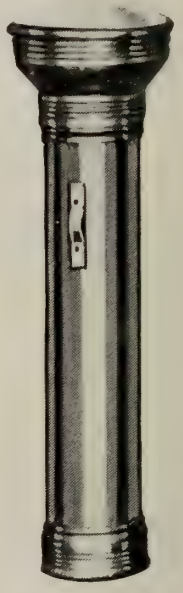
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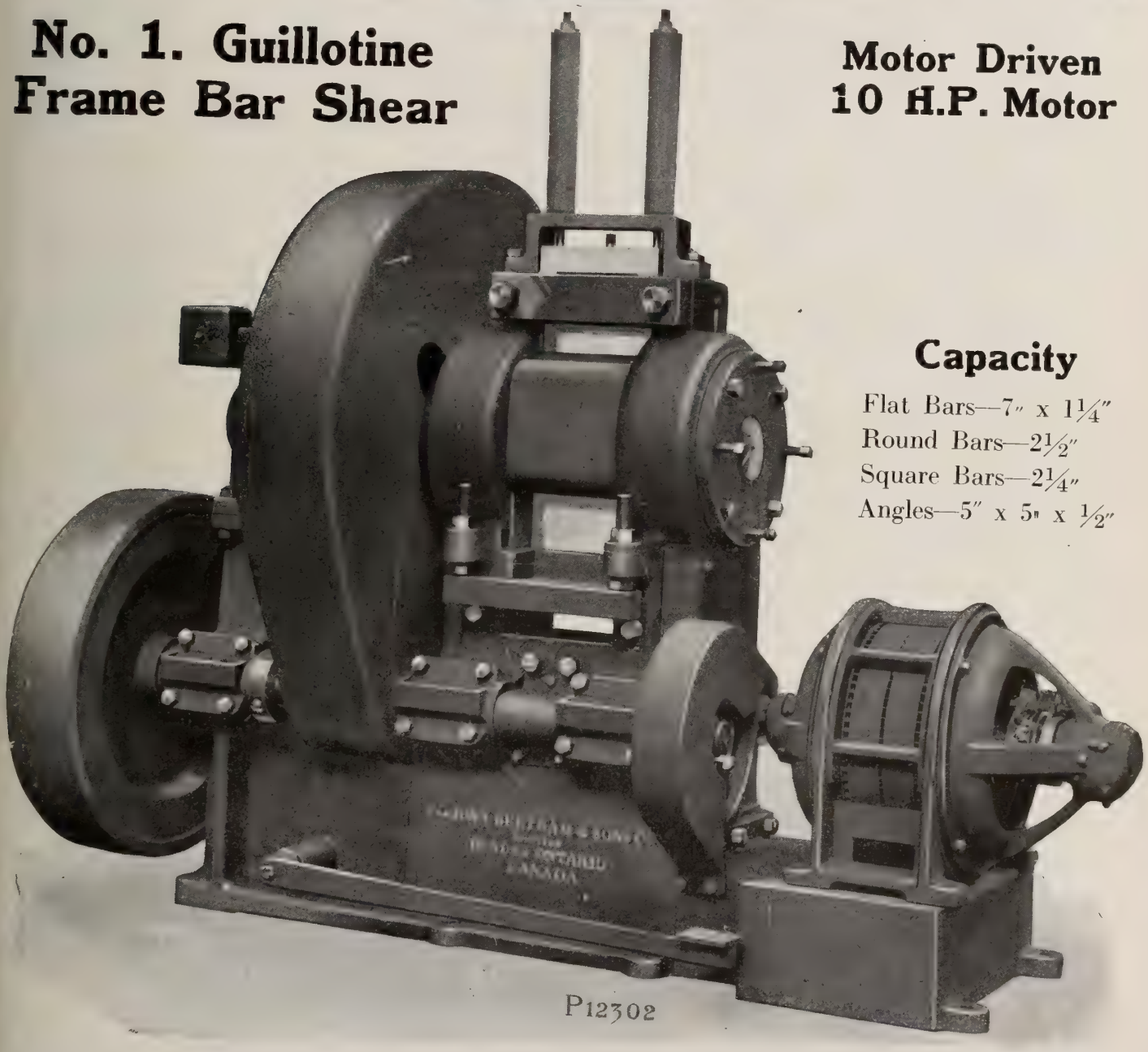
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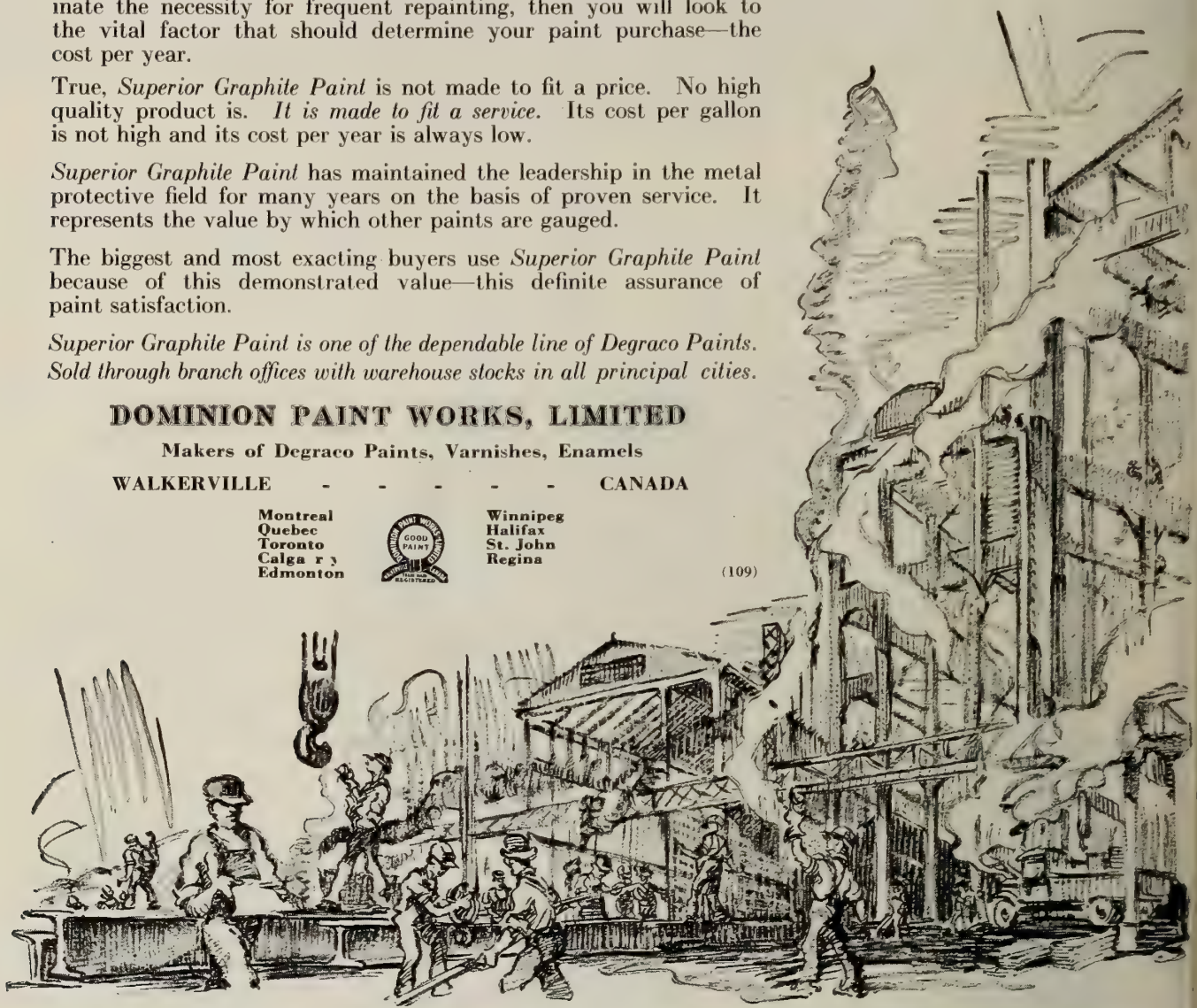
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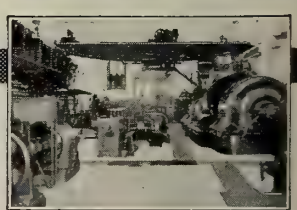
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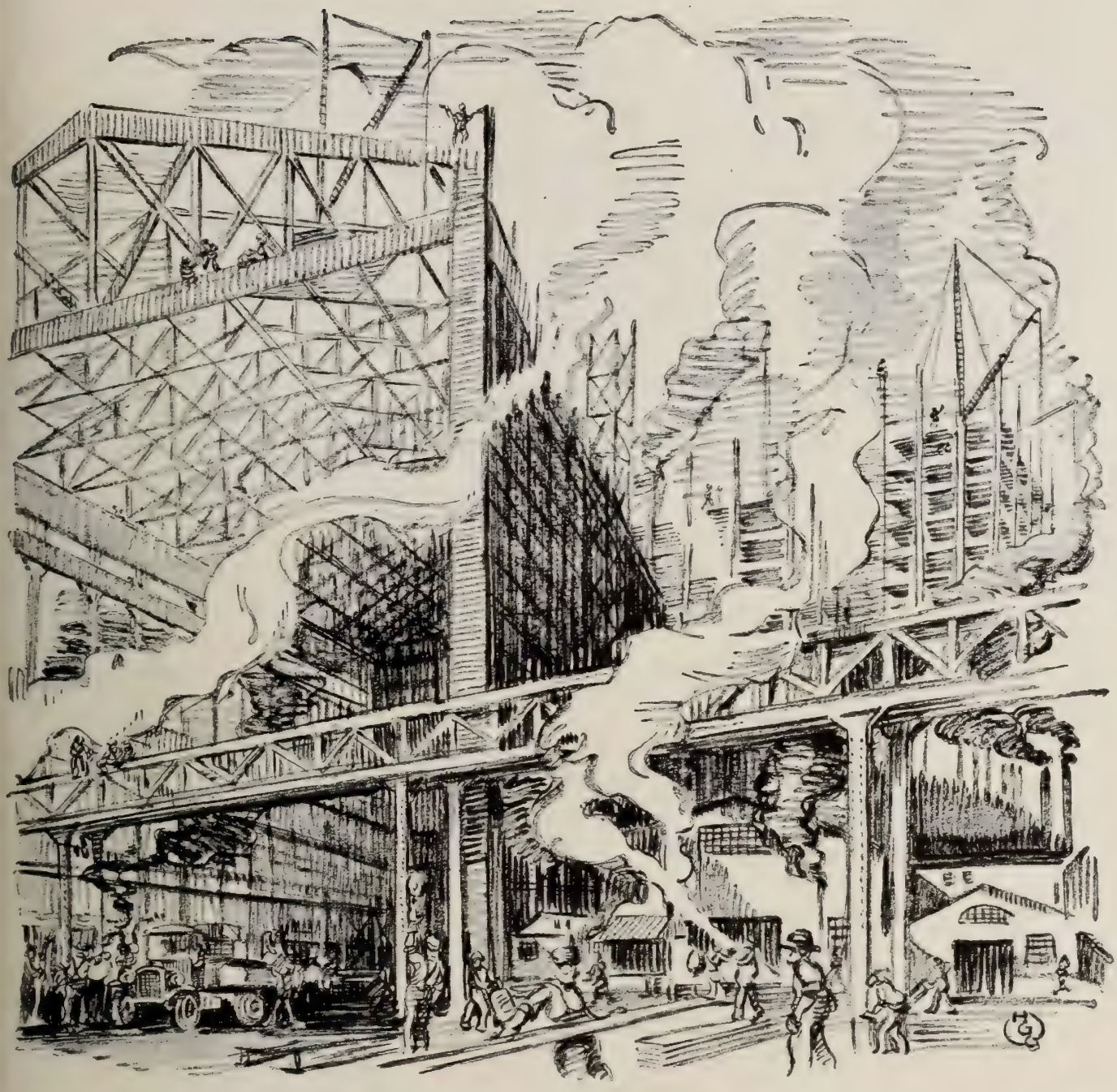
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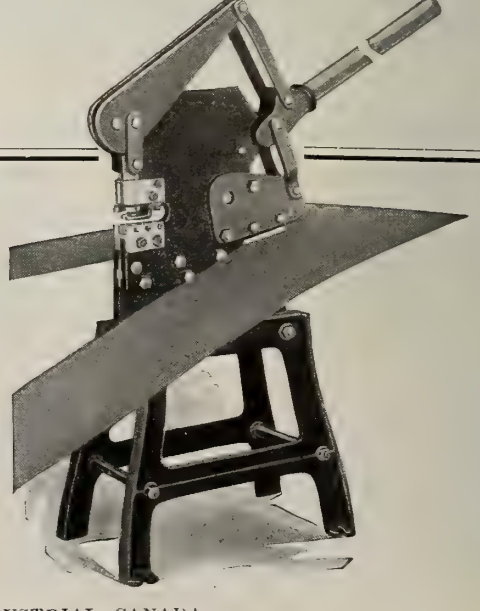
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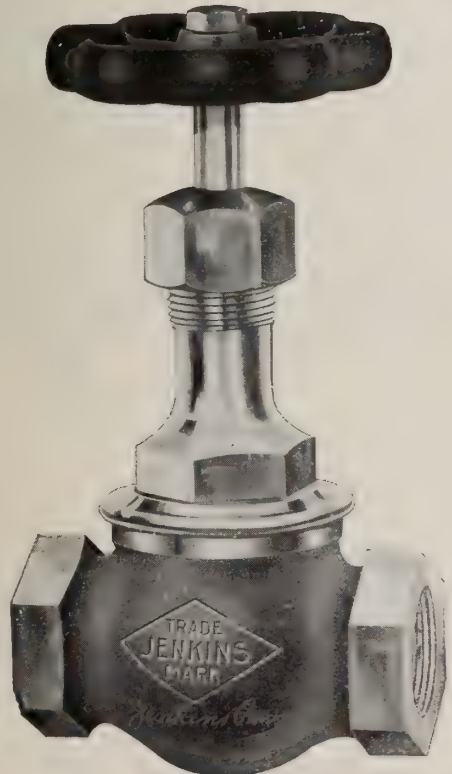


Fig. 106
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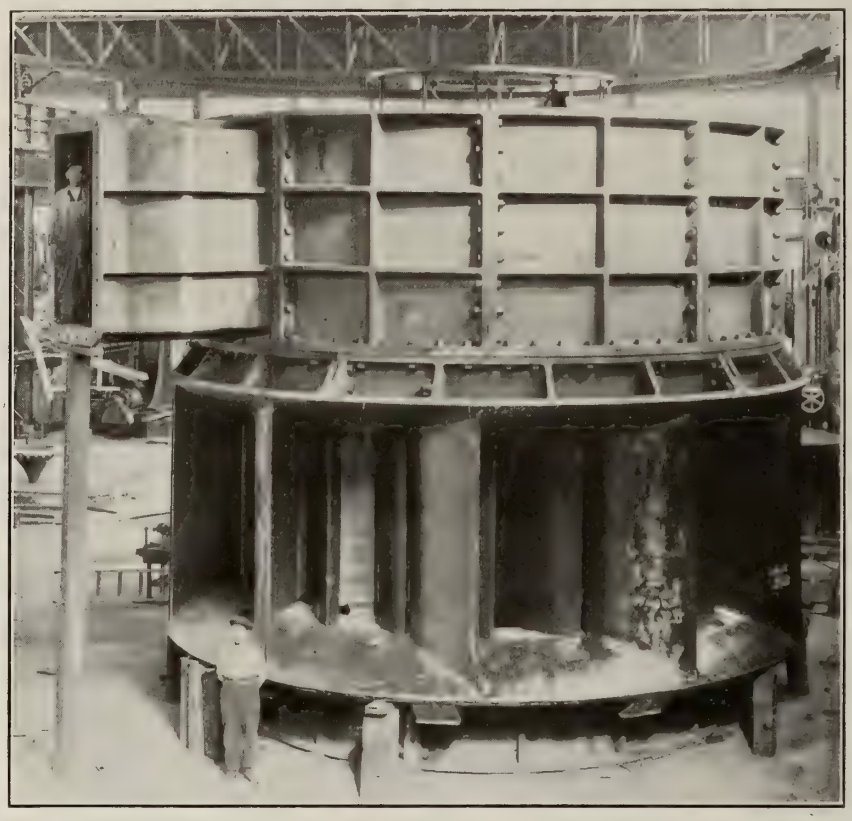
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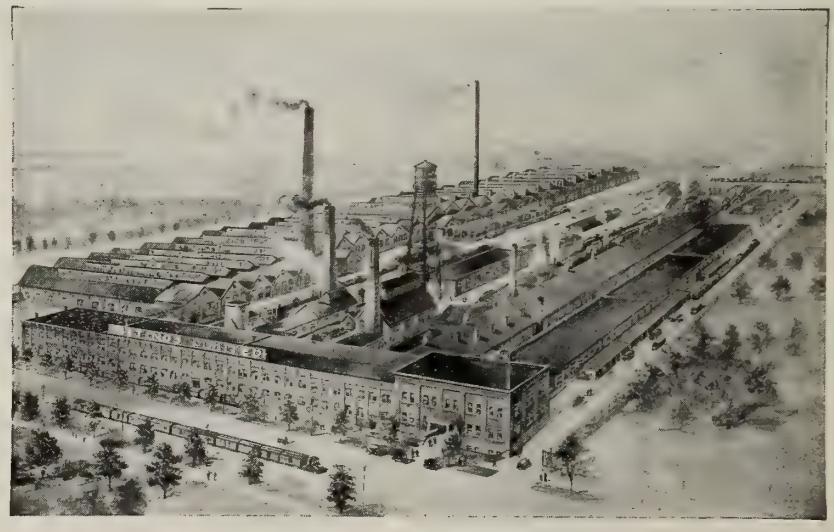
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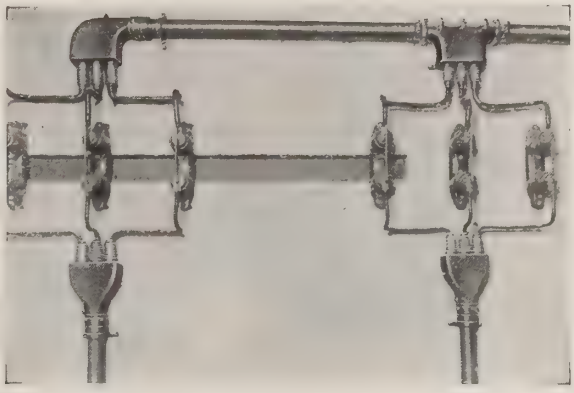
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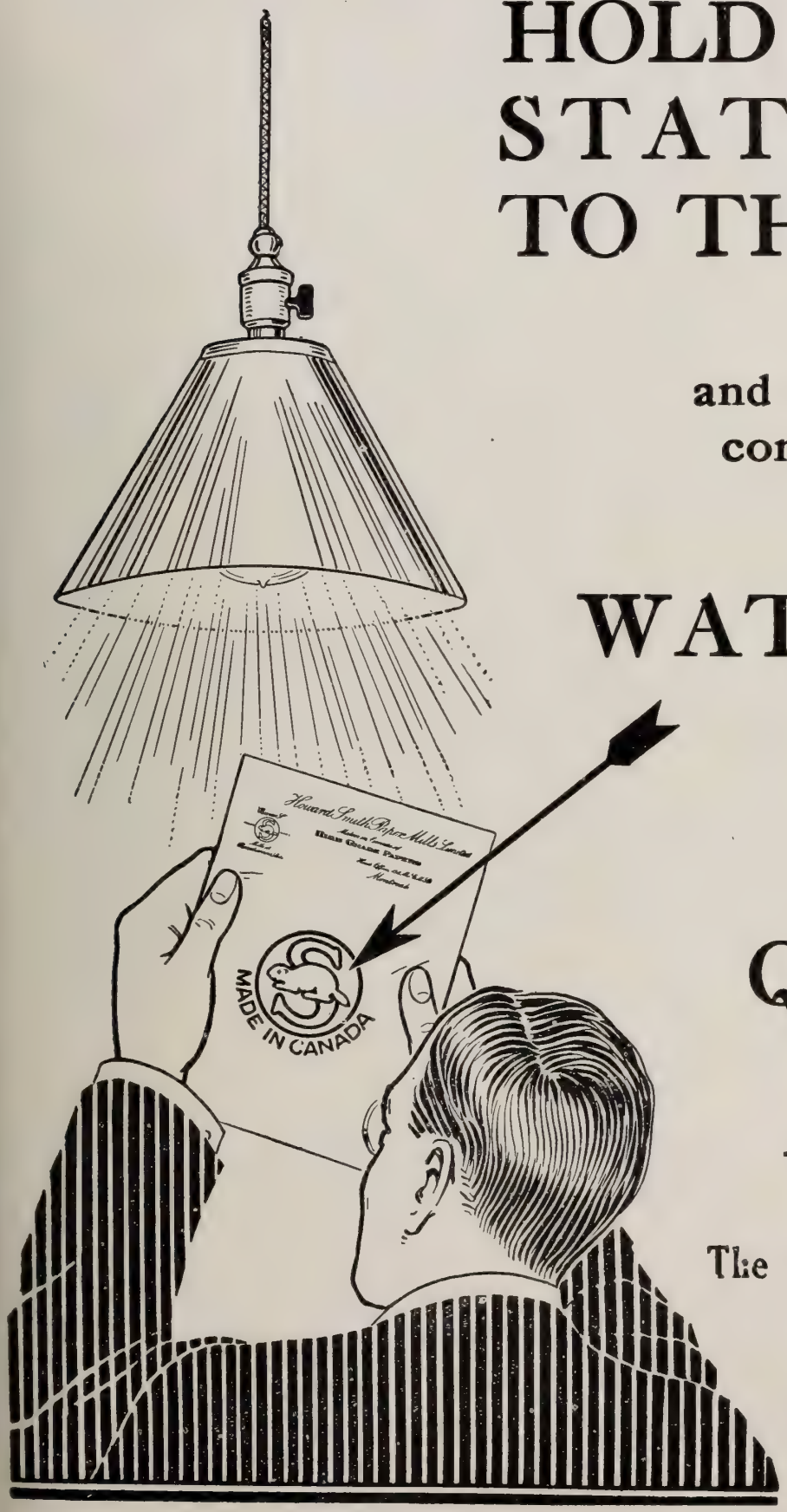
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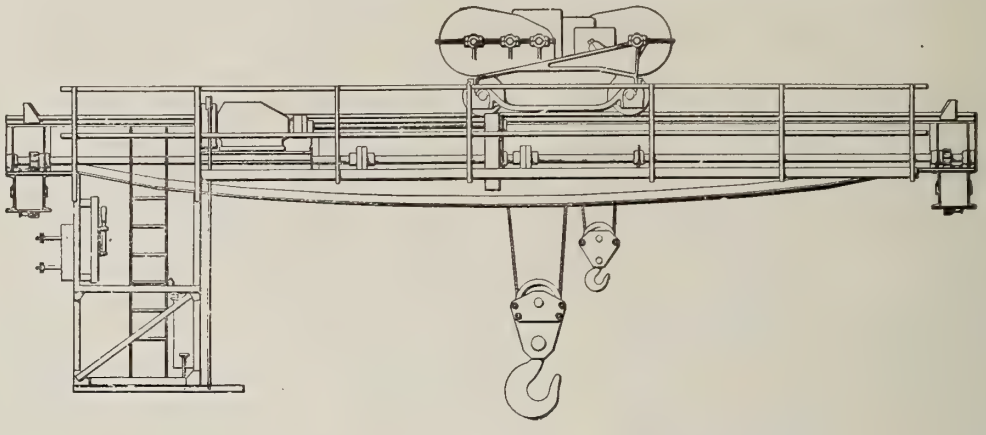
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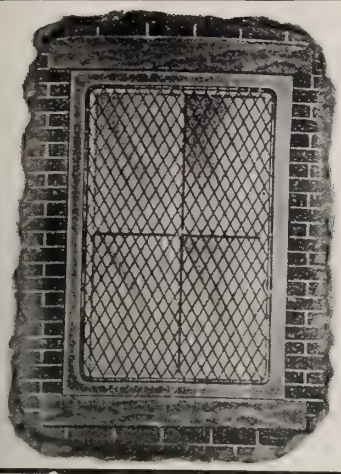
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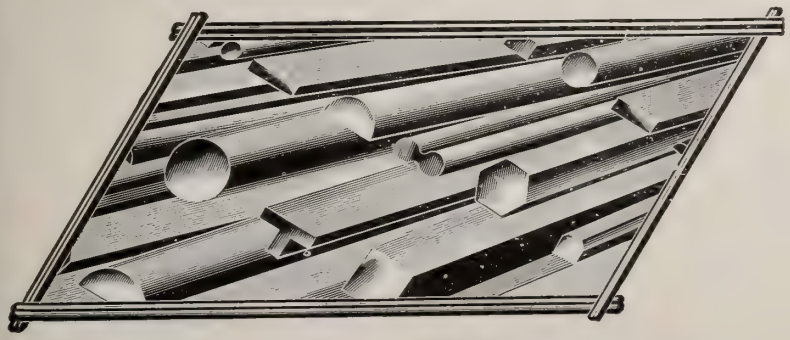
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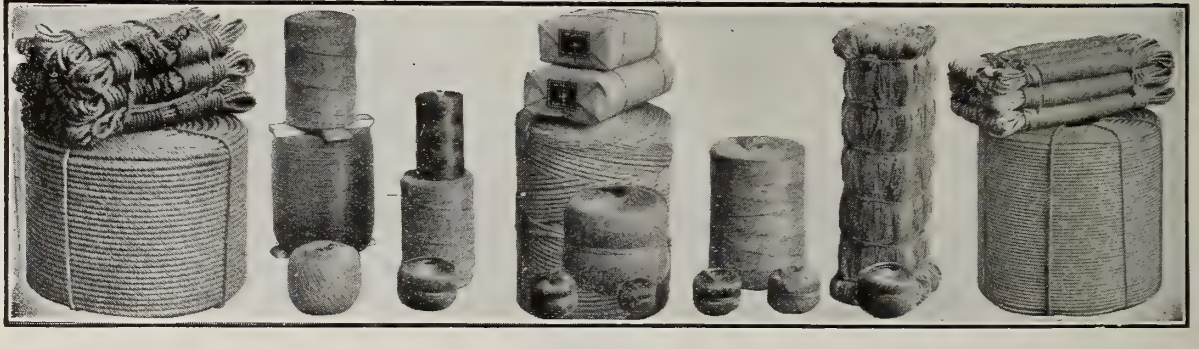
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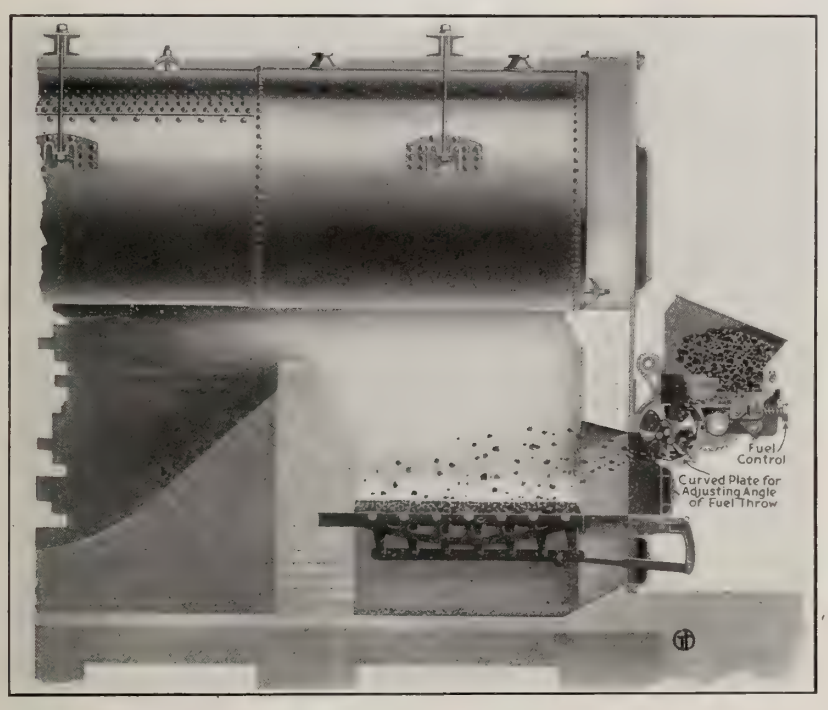
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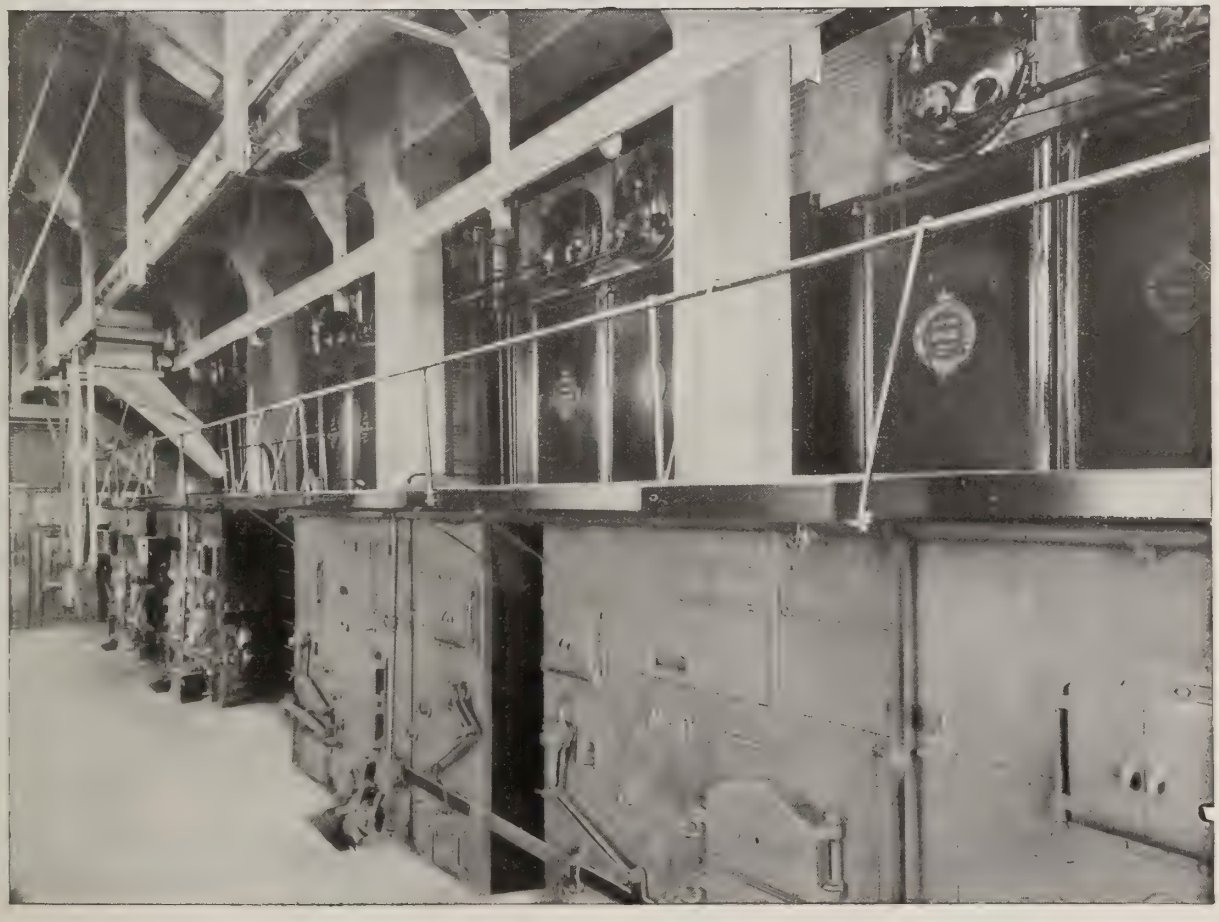
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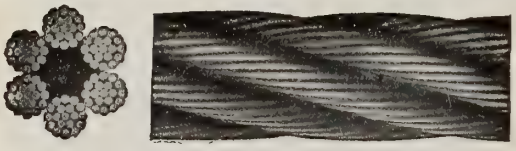
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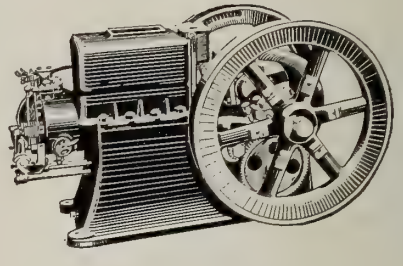
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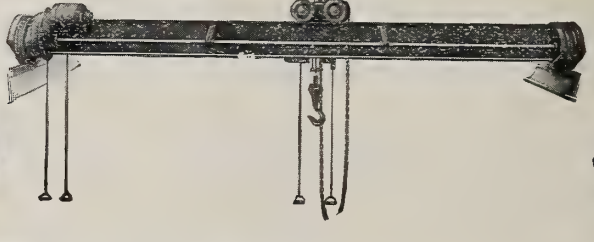
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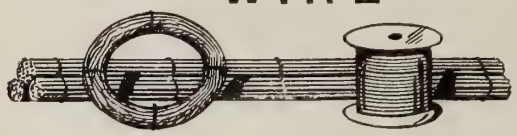
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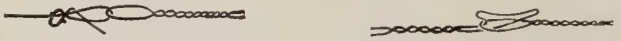
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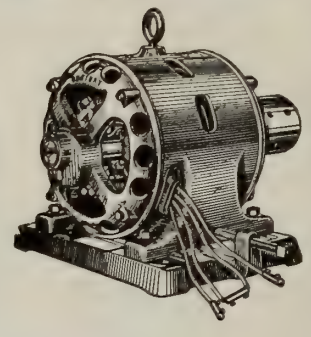
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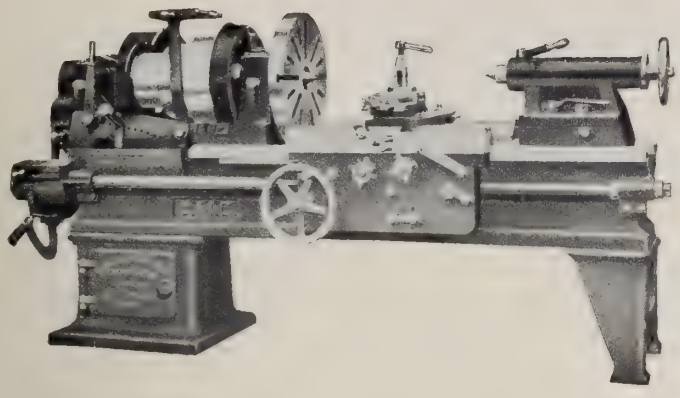


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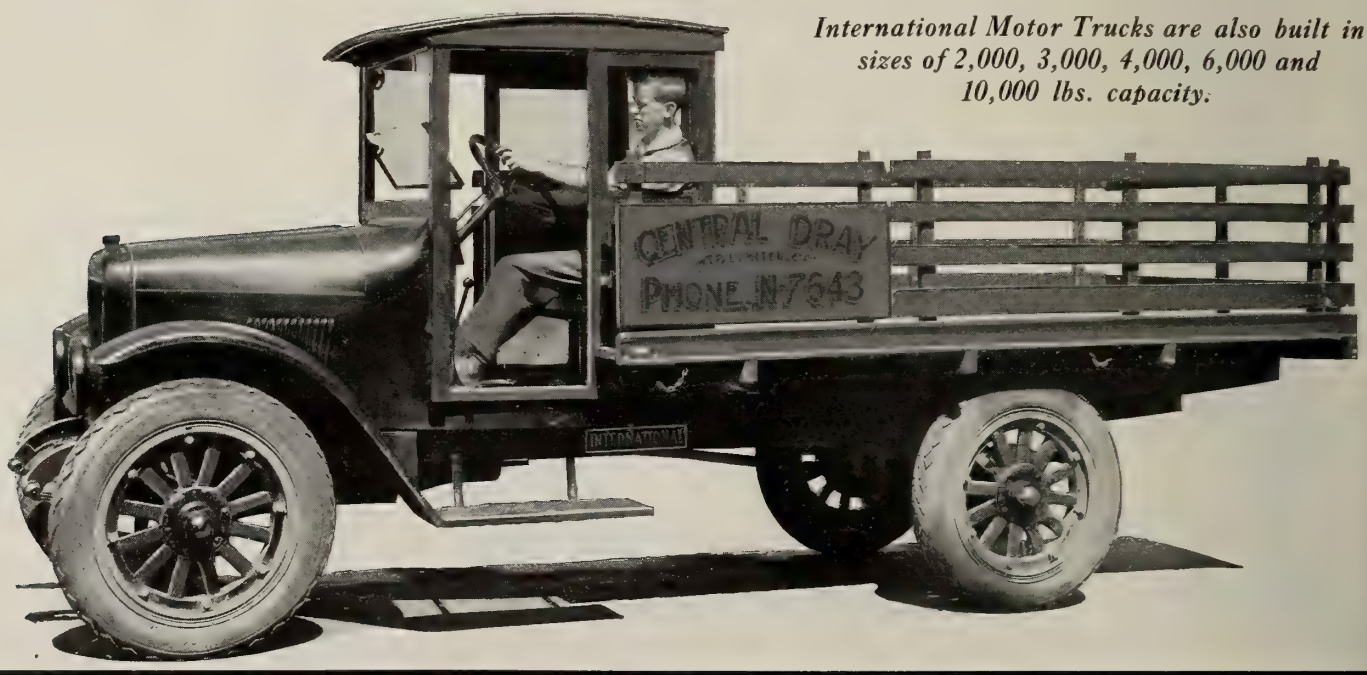
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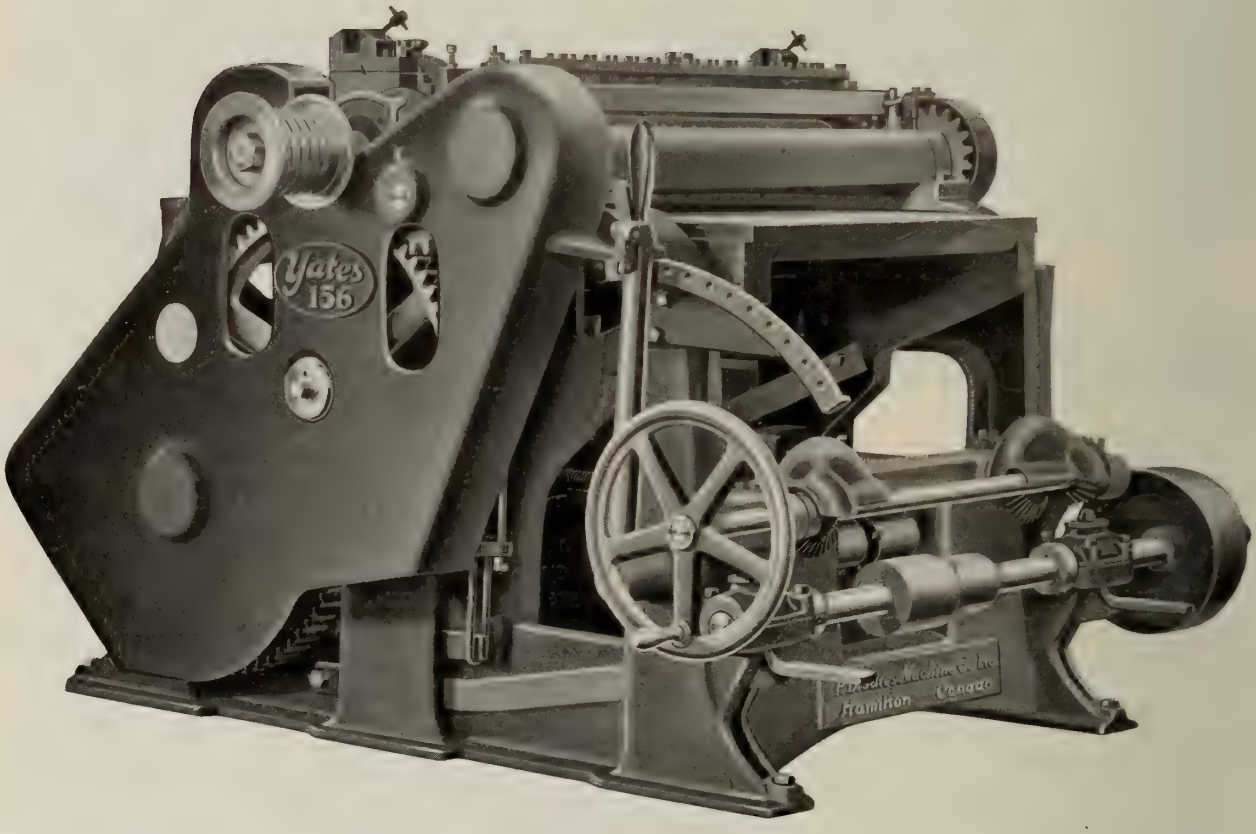
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HAMILTON, CANADA

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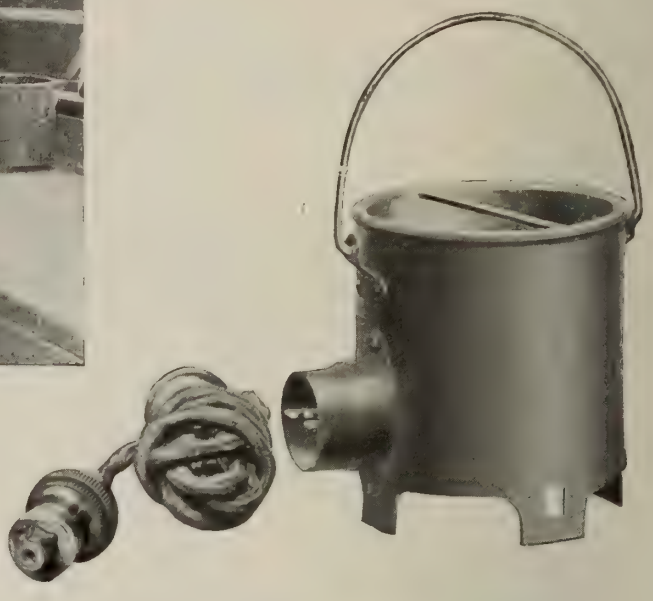
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Issued monthly as the official publication of the Canadian Manufacturers Association (Incorporated), and devoted to the advancement of the industrial and commercial prosperity of Canada

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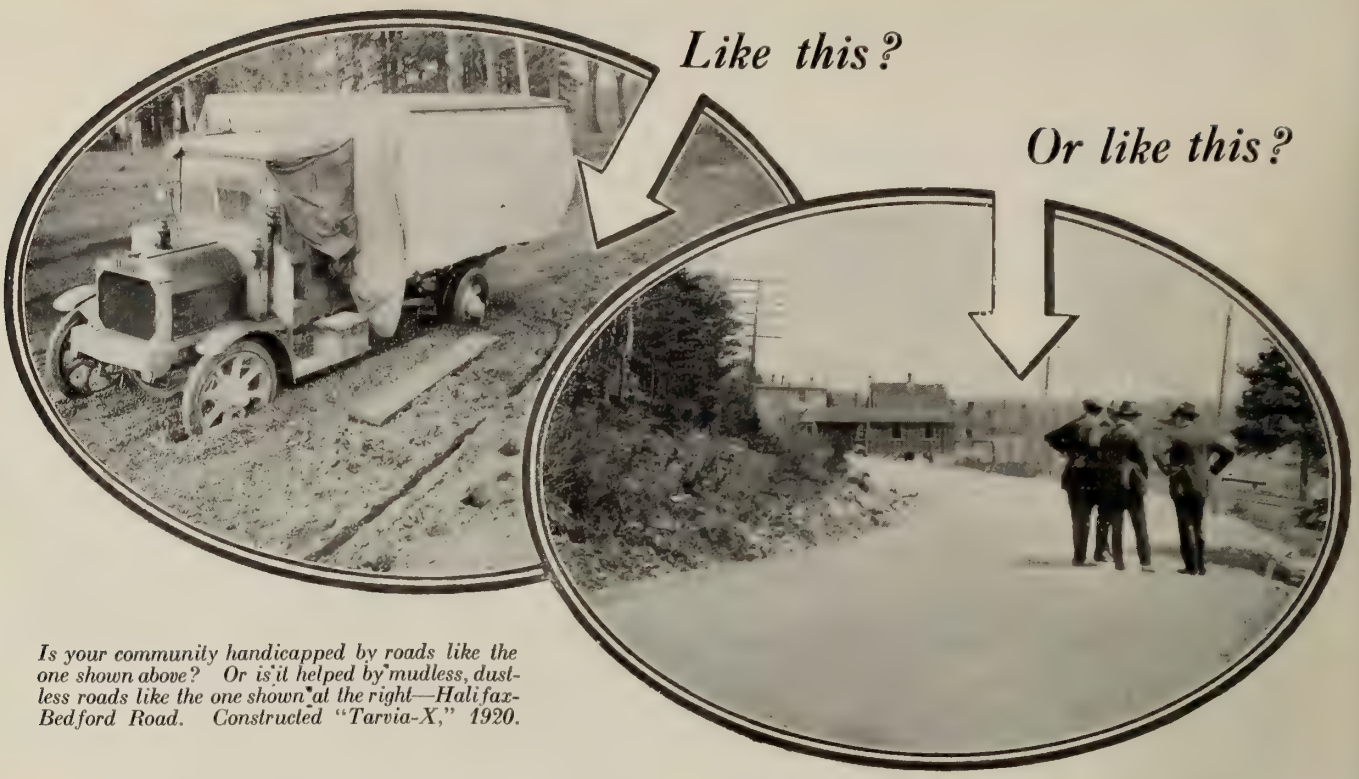
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Industrial Canada

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The Canadian Manufacturers Association
INCORPORATED

Vol. XXIII. TORONTO, APRIL, 1922 No. 12

Editorial Comment

The Maritime Provinces' Year.

IN the cycle of annual meetings that for 1922 belongs to the Maritime Provinces and it is fitting that it should be so. It is now a good many years since an annual meeting has been held in this part of Canada and in the interval much has happened to make it desirable to convene a meeting down by the Atlantic. The Maritime Division has been organized, with its own office, officers and secretary; sections have been formed and the work of the Association greatly enlarged and extended. Moreover this year the president of the Association is a Maritime Province member, who has attained well-deserved popularity among the membership.

While it is the intention in holding the annual meeting in different parts of the country from year to year to give members in those localities an opportunity to attend, which they might not otherwise enjoy, and while it is hoped that Maritime Province members will avail themselves of this opportunity in large members, yet there should be reciprocity. In a sense the Maritime Province members become the hosts of the members from the other divisions and they will expect to see a good many manufacturers from the West at the meeting. We feel that the other divisions should do their utmost, out of courtesy to their Maritime confreres, to be as largely represented as possible at St. Andrews.

There is unfortunately a feeling among some sections of the Maritime people that they are being neglected and their interests overlooked and possibly it is time that the tendency, in Quebec and Ontario, is to look west rather than east. This makes it all the more desirable that members of this Association should show a real interest in the Maritime Provinces and demonstrate that interest by going east in June, attending the annual meeting at St. Andrews, meeting the Maritime members and participating in the excursion through Nova Scotia and New Brunswick.

We have arranged for several illustrated descriptive articles about the resources and industries of the Maritime Provinces and these will appear in the May and June issues. They will serve as a sort of guide-book for the information of those who will be taking in the excursion and should prove of value especially to those who will be visiting the Atlantic provinces for the first time.

An Australian Trade Commissionership.

PROMOTION of trade between Australia and Canada through the adoption of preferential tariffs is a policy that is receiving strong support at the present time. Australia is the one outstanding English-speaking Dominion that has not as yet agreed to establish British tariff preferences with Canada and there are convincing reasons why an early arrangement, having this end in view, is desirable.

The suggestion has been made, and we believe that it is an excellent one, that the Commonwealth Government should be invited to establish in Canada an office similar to the one maintained by the Dominion Government in Melbourne. The presence of an Australian trade commissioner in Canada would go a long way towards cementing the friendly feelings existing between the two countries, while it would assist in opening up for Australian producers new markets in the Dominion. If any feeling exists in Australia that Canada's bid for preferential treatment is one-sided, nothing could more quickly dispel it than the placing of a representative in this country, charged with the investigation of openings for Australian trade.

Australia's emissary would be well received and, we believe, he would soon find that the business men of the Dominion are sincere in their desire to increase and extend the exchange of goods between the two countries on a basis as nearly equal as possible.

A Comparison of Railroad Wages.

THE status of wages paid to railroad labor, as compared with wages paid for like labor in other industries, has been a subject for comment ever since costs began to decline. It has been generally assumed that railroad labor has been receiving a higher rate than pre-

vails in corresponding outside industries. Proof that such is actually the case, at least in the United States, is furnished by the U. S. Railroad Labor Board. This body had recently placed before it the result of a survey of 3,753 separate industrial plants contiguous to twelve of the chief railroad systems in Eastern territory. The plants, large and small, were of widely diversified character, located in 988 communities and employing at the time of the survey 230,673 persons.

Following were found to be the average rates per hour paid the different classes of labor,—

	Outside Industries	Eastern Railroads
Unskilled labor	.30 cents	.41 cents
Car repairmen	.48 "	.72 "
Machinists	.56 "	.77 "
Boiler Makers	.56 "	.77 "
Passenger Car Men	.56 "	.77 "
Freight Car Men	.57 "	.72 "
Blacksmiths	.54 "	.77 "
Molders	.63 "	.76 "
Painters	.47 "	.62 "
Masons	.66 "	.74 "
Carpenters	.54 "	.65 "
Firemen on Stationary Engines	.46 "	.53 "

The survey disclosed the fact that only in a limited number of cases did outside labor receive as good a wage as that paid to railroad labor. Thus in the case of unskilled labor only 575 out of 36,865 employees did as well; among car repairmen, only 143 out of 11,292; among machinists, only 650 out of 42,159; among boiler makers only 40 out of 2,340; among blacksmiths, only 25 out of 3140; among painters only 30 out of 443, etc.

Liability for the Sales Tax.

IT is anomalous that, in the collection of the sales tax, which is clearly defined as a levy on the purchaser of goods, the vendor should in all cases be held responsible for its ultimate collection. Normally, the tax is paid by the purchaser through the vendor when he makes settlement for the goods, but what happens when, through insolvency or refusal to pay, the purchaser does not meet the obligation? Is it equitable that the vendor, who is really nothing more than a collector of the tax, should be held responsible for the money?

The vendor has usually remitted to the Government the amount of the tax billed to the purchaser, by reason of the regulation of the Government requiring him to make a return each month of the month's sales accompanied by the amount of the tax in respect of the sales made. The seriousness of the situation will be realized in the light of the large number of failures which have taken place and are still taking place. It is idle to suggest that vendors should always safeguard themselves by demanding immediate payment of a sum sufficient to cover the tax. It is almost equally futile to argue that, before selling goods the vendor should assure himself of the solvency and ability to pay of the purchaser. The Government must recognize the existence and operation of the credit system.

The Canadian Manufacturers' Association, in its interview in February with the members of the Dominion Government, emphasized the need of relief and advocated that manufacturers and wholesalers should not be held liable for any taxes which they could not collect owing to the purchaser becoming insolvent or refusing to pay, even though the manufacturer or wholesaler had in the meantime advanced the amount of the tax to the government. It seems a reasonable position to take in view of the fact that the tax is one payable by the purchaser and not by the vendor.

Quebec's Industrial Census for 1919.

THE growth of manufacturing industry in the province of Quebec, as disclosed by the preliminary survey for 1919 recently issued by the Dominion Bureau of Statistics, is quite as encouraging as that of any of the other provinces. In fact, when compared with the sister province of Ontario, it is to be noted that, as regards value of products, Quebec enjoyed an increase in 1919 over 1918 whereas Ontario experienced a decline. The principal statistics for 1919, in comparison with 1917 and 1918, are as follows,—

	1917	1918	1919
Establishments	No. 10,012	10,510	11,061
Capital	$823,317,251	860,468,768	936,712,125
Employees on Salary	No. 20,607	20,838	26,088
Salaries	$ 26,659,515	29,667,572	36,539,000
Employees on Wages	No. 190,411	186,656	179,473
Wages	$131,475,410	146,132,433	153,193,521
Cost of Materials	$403,422,445	472,444,599	517,586,980
Value of Products	$839,614,029	920,621,171	988,574,823

The pulp and paper industry occupies first position in the province as regards the value of products, its output in 1919 being worth $64,060,540. Second comes the lumber industry with $61,493,919; third, the cotton textile industry with $57,530,438; fourth the milling industry with $42,071,066 and fifth, the boot and shoe industry with $41,842,877.

In point of invested capital, first place is taken by electric power and light, with $130,000,412; second by the pulp and paper industry, with $124,101,164; third by the lumber industry, with $69,277,794; and fourth by the cotton textile industry with $37,962,311.

The province had 1,867 establishments engaged in the manufacture of butter and cheese; 1419 in the lumber industry; 428 in flour milling industry; 46 in pulp and paper industry; 91 in boot, shoe and leather industry and 12 in the cotton textile industry.

The Power Plant a Source of Waste.

WITH the passing of the day of easily gained profits, with the partial completion at least of the period of readjustment and with the inception of an era in which economical management is absolutely essential to success, it is highly desirable for every manufacturer to check up all possible loopholes of waste and inefficiency.

In this number we have given considerable space to an article, written by an experienced engineer, directing attention to the possibilities of securing economies in power plant operation. The claim is made that the average manufacturer knows little or nothing of the results that are being obtained in his power plant, especially in

the boiler room. This lack of knowledge, it is further contended, is prima facie evidence that results are sub-normal. If such is actually the case, there should be a rush to discover how the situation may be remedied and the economies effected.

The writer of the article cites a number of instances where, by making certain adjustments, introducing new equipment and gingering up the staff, surprising savings were made. He submits that profits of 100 per cent. per annum on the capital laid out in plant improvement are not unusual with good engineering, while profits of from 25 to 50 per cent. are a regular part of the day's work.

If it is the case that most plants are operated blindly, if results are actually sub-normal, it is surely time that manufacturers took note of the circumstance and began to make investigations. We hope that readers of INDUSTRIAL CANADA will not overlook the article to which we refer but will give it careful consideration and devote some time to a study of their power plants and an examination of costs and results. Evidently great savings are possible in this one department alone.

The Crow's Nest Pass Agreement.

A GOOD deal is being heard to-day about what is known as the Crow's Nest Pass Agreement and a word or two of explanation may not be out of place, particularly as so much will depend on the way in which the question is settled at the present session of Parliament.

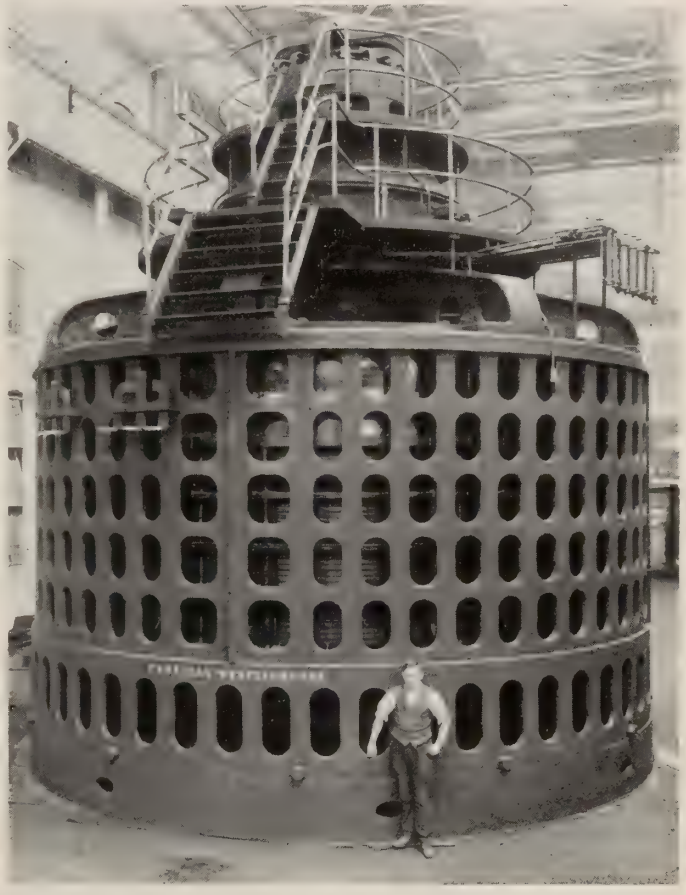
The Crow's Nest Pass Agreement was a special act of Parliament, passed in 1897, for the purpose of subsidizing the construction of a railway through the Crow's Nest Pass. This railway was built by the Canadian Pacific Railway Company. An important provision of the act was that the company should make a reduction in general rates and tolls upon certain classes of merchandise moving west from Fort William and points east to points west of Fort William and that no higher rates than these reduced rates should thereafter be charged. The commodities affected and the percentage of rate reduction were as follows,—

Fresh and green fruits, 33⅓ per cent.
Coal oil, 20 per cent.
Cordage and binder twine, 10 per cent.
Agricultural implements of all kinds, set up or in parts, 10 per cent.
Iron, including bar, band, Canada plates, galvanized, sheet, pipe, pipe fittings, nails, spikes, and horse shoes, 10 per cent.
All kinds of wire, 10 per cent.
Window glass, 10 per cent.
Paper for building and roofing purposes, 10 per cent.
Roofing felt, box and packing, 10 per cent.
Paints of all kinds and oils, 10 per cent.
Live stock, 10 per cent.
Woodenware, 10 per cent.
Household furniture, 10 per cent.

There was also provision for a reduction in the company's rates and tolls on grain and flour from all points on its main line, branches or connections west of Fort William to Fort William and points east, of 3 cents per hundred pounds.

These reductions went into effect in 1898 and remained in effect until the war. Then, on August 12, 1918, an increase of 25 per cent. in freight rates was put into effect under the authority conferred by the War Measures Act, which overruled any existing acts establishing maximum rates. On the lapsing of the War Measure Act and the orders-in-council issued thereunder, the Board of Railway Commissioners issued an order maintaining the increased rates in effect under powers conferred by Subsection 5 of Section 325 of the Railway Act of 1919. Under the same powers it ordered the further increases in freight rates, which were subsequently made.

Subsection 5 of Section 325 of the Railway Act of 1919 was introduced for the purpose of giving the Board of Railway Commissioners power to fix rates irrespective of the provisions of such acts as the Crow's Nest Pass Agreement, but it was explicitly stated that it would only remain in force for a period of three years from the date of the passing of the Act. That is to say, on July 6, 1922,



A Mammoth Generator

This is one of three 45,000 K. V. A. (55,000 H.P.) capacity generators built by the Canadian Westinghouse Company, Limited, Hamilton, for the Hydro Electric Power Commission of Ontario. They weigh 700 tons each and are the largest generators in the world. They are installed in the new Chippawa power plant at Niagara Falls, and are now in use.

unless Parliament takes action to retain or amend the sub-section, the scale of rates established by the Crow's Nest Pass Agreement again comes into effect. This will obviously mean a very considerable reduction, for at present, as compared with September 1, 1914, rates in Western Canada are higher by 25 per cent. plus 20 per cent. than they were at that time.

Newspapers Support Marking Act.

IT is gratifying to observe the measure of support which the press of Canada is according to the principle of the Marking Act. This act is still on the statute books but its operation has been postponed by order-in-council until the present Parliament shall have had an opportunity to

reconsider its proposals. The Canadian Manufacturers' Association is naturally interested in the principle underlying this legislation, which is a recognition of the right of purchasers to know the name of the country which produced the imported goods they buy, and one of the statements laid before the Government in February by this organization was in support of the idea behind the measure.

The Montreal Star makes a strong argument in favor of the marking of imported goods, when it refers to the extent to which made in Germany goods are flooding the Canadian market.

"German-made watches are being sold in scores by the small shops of Montreal and are being offered at a price against which the Canadian made product cannot hope to compete. Canadian factories have not been able to retail their pre-war "dollar watches" since 1914 and yet Germany can send their merchandise more than three thousand miles and offer them to the storekeeper on terms that give him a satisfactory profit."

"One of the large merchandise houses of this city is shortly sending out its buyers to scour the markets of Europe and of thirteen who will leave Montreal no less than seven are going direct to Germany. The flood of German made toys to be seen in the stores last Christmas-time was obvious to the superficial observer."

"If a man wants a German silver watch for a dollar he is entirely within his rights in purchasing one. But the watches should be marked in clear, readable type "Made in Germany." The same brand should be placed on every article from Germany which is offered for sale here in Canada. For there are a certain number of people who are patriotic enough and far-seeing enough to purchase "Made in Canada" goods and they should be given every facility for giving expression to their choice.

"German marks, German silver, German goods and German promises are all of the glittering variety, attractive to the eye, but hocus pocus below the surface. It is part of the German scheme to re-conquer the markets of the world."

The Manitoba Free Press admits that there is a good deal to be said for the act and concludes an editorial on the subject with the following comment,—

"If the act operated as a protective measure which resulted in increasing the price of such goods in Canada the situation would be very different. That is not the case, however. Inasmuch as the marking of the imported goods with country of origin simply enables the purchaser to ascertain where they were made and to use his own free discretion about buying either Canadian-made or imported goods, there is no apparent reason why he should not have that right."

The Ottawa Citizen, dealing more particularly with the petition of the printing interests for a continuance of the marking regulation so far as printed goods are concerned says,—

"The Dominion Government will probably realize, when the question is taken up that there is nothing unreasonable in the request with regard to printing and lithographing. No extra cost to the Canadian consumer is incurred. There is nothing to prevent or penalize the importing of printed goods from abroad. They may be shipped in as freely as before. But the purchaser will know where the printing was done, by the mark on the goods, "Printed in Germany", "Printed in United States", or wherever they originated.

"Other things being equal, it is expected that the Canadian public will be more inclined to purchase Canadian products; but those who prefer American or British will still be free to buy where they are best suited."

The Edmonton Journal declares that "the principle of the legislation is sound. Canadians have a right to know where the goods are made that they buy."

The Hamilton Spectator, also dealing specifically with imported printing matter, says,—

"One of the main objections raised to the marking regulations was the possible injury to goods resulting from such stamping. Such an excuse cannot be pleaded in the case of printed material. There is no dfficulty involved in such an operation and no disfigurement or injury need arise. Customers who desire to patronize these cheaper foreign wares, in preference to supporting national industry, ought not to complain if their preference is indicated in the manner referred to. On the other hand those who wish to be protected against purchasing, through inadvertence, articles coming from outside sources have the right to demand such protection."

The Calgary Herald also support the measure and says,—

"By carrying out the existing regulation a natural impetus would be given to an important Canadian industry. It would be helped, not by putting impediments in the way of importation of goods from abroad, but by the expressed preference of Canadian people for our own products, a preference in buying made possible by exact information concerning the article bought."

Confusion of German Weights and Measures.

WE are in recipt of a reproduction of an article by an official in the Textile Testing Bureau of Zittau, Germany, published in the Leipziger Wochenberichte fuer Testile-Industrie of Aug. 30, 1921. It demonstrates by irrefutable evidence the chaos of weights and measures in which the German textile industry is involved as a result of the compulsory introduction of the metric system, the persistence of old German standards and the extensive use of the English system 128 years after the introduction of the metric system into Continental Europe, 51 years after the final decision by Bismarck to force that system into exclusive use throughout the German Empire, and 3 years after the World War during which hatred of everything English was carried to such extremes in Germany that the most desperate efforts were made to abolish the use even of words of English derivation.

The German writer first traces the efforts during the past fifty years to unify textile weights and measures on a metric basis; then, contemplating the condition following the war, he abandons hope of any success in a continuance of the propaganda, and finally, admitting the dominating position of the English textile standards, in despair prepares an exhibit of German textile standards based as far as possible on the English yard and pound.

Even in this simplified form the German textile standards are still in a state of indescribable confusion because of the mixture of two established systems of measurement, the metric and English, neither of which can the Germans get rid of.

The German article carries a warning to English speaking countries against giving encouragement to the faddists who would have us try the experiment of compulsory metric legislation.

Canada's Representative at Genoa.

WE should like to add to the widespread approval with which the appointment of Sir Charles Gordon as Canada's representative at the Genoa Conference has been greeted. Sir Charles Gordon as a large employer of labour in Canada, as Chairman of the Canadian Trade Commission in its active days, as Vice-President of the Bank of Montreal, and as a former President of the Canadian Manufacturers' Association has experience and training in large affairs so necessary in dealing with the problems that will be discussed at the Conference. His duties there will be all the more onerous because of the decision of the United States Government not to participate in the Conference. It is understood that this decision was reached because of the view held in the United States that the Conference will be political

rather than economic, and the Government is thereby continuing its policy of non-intervention in European political affairs. Even assuming that view to be correct, it is still true that if there were no grave financial and economic problems to solve in Europe as an aftermath of the war, the political problems would be much less acute, and it seems a little regrettable that there should only be one representative from the whole of North America.

Sir Charles will bring to the study of these questions long experience and broad sympathy particularly in relation to the development of permanent export trade.

One of the subjects to be dealt with at the Conference is the ter Meulen International Credits Plan which has been accepted by the League of Nations. The ter Meulen scheme would remove one of the main obstacles to revival of normal business by enabling traders to obtain short and long term credits with which to finance imports. The idea is to provide a special form of security to reinforce the credit of importers. This special form of security would be Government bonds, the value of which would be fixed so as to inspire confidence in the lender, since the bonds can only be issued for an amount justified by the gold value of the underlying security, checked by the international commission of experts. These bonds would also be attractive to lenders in that they could be made out in whatever currency the lender may require.

The scheme will cause no change in the way that business is arranged, for the exporter must still satisfy himself as to the standing and credit of his customer. The scheme merely provides the importer with facilities for obtaining credits and puts at his disposal valuable bonds which he may pledge as collateral security. The importer borrows from his Government for the period of the credit, the bonds he needs as collateral, and each government will arrange the conditions under which it will grant a loan of bonds. Before the transaction can be completed, the International Commission must be satisfied as to the necessity of the commodity and that the total amount of the bonds authorized for issue is not exceeded.

This plan is held by many authorities to be the best yet conceived to assist the distressed nations to get on a productive basis and once more absorb their quota of exports from other countries. It is to be hoped that Sir Charles will bring to bear his broadest sympathy in the consideration of this question.

Mr. Parsons and the Weekly Rest Day Convention

IN the Canadian Congress Journal (the official magazine of the Trades and Labor Congress of Canada, Mr. Tom Moore, President) for February, 1922, the following is among the editorials:—

GOD AND GOLD

"A glaring example of the difficulty of serving two masters is seen in the case of Mr. S. R. Parsons, who attended the last conference of the International Labor Office as the representative of the Canadian Manufacturers' Association. Mr. S. R. Parsons in private life is a leading member of a Christian church and is also an ex-president of the Canadian Manufacturers' Association and has represented that organization at two of the three annual conferences of the International Labor Office. At the last conference of the International Labor Office Mr. Parsons was placed in the distracting position of deciding for which Master his vote should be given.

"His Christian doctrine declares that:

Six days shalt thou labor and do all thy work; but the seventh is the Sabbath of the Lord thy God: in it thou shalt not do any work, thou, nor thy son, nor thy daughter, thy man-servant, nor thy maid-servant, nor thy cattle, nor thy stranger that is within thy gate.—Ex. 20: 9, 10.

"The International Labor Conference was asked to declare for one day's rest in seven. Mr. S. R. Parsons as the representative of the Canadian Manufacturers' Association, guided by the caucus of the employers' representatives, cast his vote in favor of seven days' continual labor for millions of workers throughout the world. (We do not believe that all employers in Canada agree with the views of Mr. Parsons on this question.)

"The law of man, exemplified by demands of modern industry, interpreted by Mr. Parsons and such other employers as agree with his ideas, conflicted with the law of God, and Mr. Parsons distracted between the two, fell by the wayside, and voted against the carrying out of this Christian principle—the putting into effect of one day's rest in every seven."

In order that our readers may have the actual facts of the case, as referred to by Mr. Parsons in several addresses since his return from Geneva, we make clear the situation as follows:—

After the question of the weekly rest day in industries was submitted to a commission for study and report, the final draft was approved by the commission on a vote of seventeen to twelve with four members abstaining and three members absent. The report says,

"With regard, however, to the last paragraph of Article 2, which provides for compensatory periods of rest, opinion was divided, a part of the commission (while not unfavorable to the principle of compensatory rest) being strongly opposed to inserting in a draft international convention a provision which might involve placing on all States the heavy obligation of securing and supervising the provision of compensatory periods of rest."

Mr. Parsons states that every employer delegate in the Conference was in favor of a full weekly rest day. They all objected, however, to the proposal for a compensatory rest period. They felt that when special work had to be done on a rest day (Sunday or otherwise) and the workers were paid at the rate of time and a half, double time, or even triple time, it was unfair to ask in addition to this the same number of hours off work as were worked on the rest day. In the case of a single engineer of a plant who had to do some special repair work on Sunday, for which he would be paid at extra rates, he would under Mr. Moore's proposal be able to ask for the same number of hours off on another day. This would necessitate closing down the entire plant. It was found also that it would work hardship and chaos when it came to municipal and governmental undertakings. It was also felt among employers that this proposal would actually tend to increase Sunday work.

Sir Montague Barlow, chief government delegate of Great Britain, who was the chairman of the commission, implored Mr. Tom Moore to withdraw the compensatory rest period in order that unanimity might prevail. Further, Sir Montague in bringing in the report to the plenary session of the Conference had to disagree in part with the findings and, therefore, offered to resign but was not allowed to do so. Part of his statement as reported in the Conference paper was:

"I must say (and I say them regretfully) a few words on behalf of Great Britain. I use the word 'regretfully' because I am sorry to find myself in disaccord with some of the members of the commission,

but at the same time I am quite frank in what I say to you, and I say it believing what I say to be right. I think that the principle of compensatory rest, inserted at the end of Article 2 by a small majority, is a wrong one for an international convention. In my view it is wrong to try to insert it in an international convention, and so strongly do I feel that, that I am very much afraid unless the convention is amended in this respect, it will be impossible for me, or for Great Britain, to vote for it and we may have to vote against it."

There were also serious objections to certain other side proposals which the workers desired to be tacked on to the weekly rest day measure. Sir Montague continued:

"Therefore when I say, speaking for the British Government, that I cannot accept this proposal or that proposal, please remember that it is not because we have not consecrated in England the principle of the Sunday rest day. But I assure you, with our experience, that if you attempt to insert in an international convention these tightly drawn clauses you will not improve the position, you will not make the principle of the Sunday rest day prosper; you will rather throw it back, because you will produce this situation, that a good many countries which have already a general Sunday rest day and want to help other countries to make progress in the same direction, will find themselves forced to oppose the convention and possibly to refuse to ratify it."

Sir Montague Barlow was followed by Employers' Delegates General Bayley of Great Britain, Mr. Edstrom of Sweden, and Mr. Gemmill of South Africa, as well as others, who stated that they could not accept the special amendments desired by Mr. Tom Moore and others. Finally Sir Montague Barlow in reply to statements of the workers said:

"Every State is to have a weekly rest day. That is exactly what we say, and if we had Article 1 in the convention and nothing more we should have been acting entirely in the spirit of paragraph 5 of that last clause of the Peace Treaty. There is nothing in the Peace Treaty about compensatory periods of rest; there is nothing in the Peace Treaty about States giving reasons; there is nothing in the Peace Treaty about notices being posted up in the works; and it is when we get into details that all the troubles arise. Surely we can agree to this. The convention gives you the particular principle. It is a great advance. If you go into details you will get into trouble. Cannot we agree in a reasonable spirit not to trouble about the details, at any rate when there is going to be difficulty about them? Cannot we agree to drop any details which are going to cause difficulty and then vote for the convention with unanimity? I very much hope that in the broad spirit of conciliation, in the broad spirit of hope, and in the broad spirit of faith in these Articles in the last clause of the Treaty of Peace, we can agree on that course."

Notwithstanding the objections raised by Sir Montague Barlow and other government delegates, as well as employers delegates, the weekly rest day convention was carried in the plenary session by a small majority. It was felt and stated, however, that the workers had made a very great mistake in pushing these objectionable clauses through, and that the result would be that the different governments of the world when they came to consider the question would not include such clauses, and that the whole weekly rest day measure might be imperiled in many countries. No sane government would enact such a convention. Only a very few of the countries of the world (and these not industrial countries) have adopted the chief conventions and recommendations of the three International Labor Conferences that have been held because of unworkable and drastic provisions. For instance, the British Government, in stating its objections to the eight-hour day measure as adopted at the Washington conference, said: "His Majesty's government have no option but to decide that they cannot ratify the convention."

It will be seen, therefore, contrary to the article in Mr. Tom Moore's paper, that the workers delegates are the ones who are likely to impede any fair, honest, and sincere legislation covering the weekly rest day in industry. Mr. Parsons was not "placed in a distracting position" as his sense of what was right and just to all parties prevented him even from thinking of any other course.

The Minimum Wage Evil.

WHILE the Canadian Manufacturers' Association has agreed to accept the principle of minimum wage legislation for females and minors and has given support to such legislation when enacted, it has never seen any valid reason for extending the principle to labor in general and has opposed all proposals having such object in view. So far as females and minors are concerned, employers who are conducting their industries under fair conditions, find a certain measure of protection in a minimum wage against the competition of less scrupulous employers who would otherwise be sweating their labor, while on humanitarian grounds it is desirable that sweat-shop methods should be obliterated.

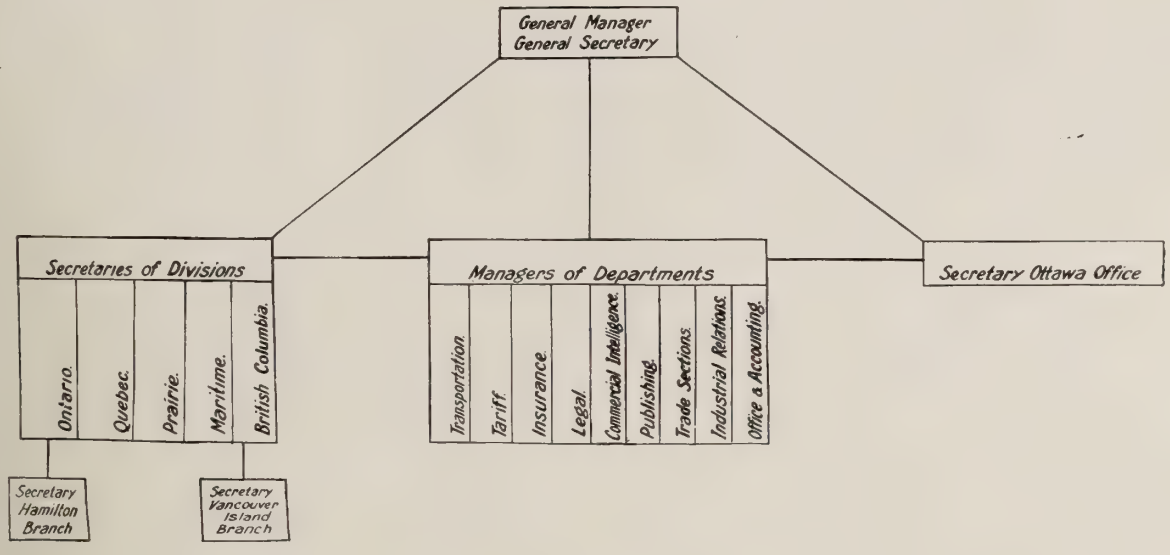
The main objection to a minimum wage for males is becoming quite apparent at the present time, when we consider the situation, in those Canadian municipalities which have legislated on the subject. It lies in the difficulty of reducing the minimum when changing conditions render this desirable. Were the question to be dealt with on a purely economic basis and were the rate to be governed by some such factor as the cost of living index of the Department of Labor, there would be much less objection to its operation, but unfortunately it is impossible to deal with the problem in this way. Political considerations are almost inevitably introduced and, when municipal councils have the fear of the labor vote inspiring their words and actions, there is little hope for the maintenance of an equitable rate.

Consider the case of Toronto. A civic by-law was passed in 1914 providing that civic employees should be paid the "union or prevailing" rate of wage subject to a minimum of 25 cents per hour and also that contractors engaged in civic contracts should pay these rates. As the union or prevailing rate of wage rose during the years 1914-1920, the council, by resolution passed from time to time, increased the minimum until, when the union or prevailing rate reached the peak in 1920, the minimum had risen to 60 cents an hour, where it still remains.

The situation has now become contradictory, for it is absurd to claim that a 60 cent wage for common day labor represents the union or prevailing rate of wage current at the time. Instead of being based on such a wage, the civic minimum is quite independent of it, setting up in itself an artificial rate, which is interfering with and upsetting the union or prevailing rate. It may be claimed that the rate only applies to a limited class of day labor, directly or indirectly in the civic employ, but the fact that this class of labor is being paid a disproportionate rate has its effect on all labor in the city and surrounding country, skilled as well as unskilled. It is a contributory cause to the unemployment now prevailing, for business cannot be conducted to-day on the basis of such a high wage rate.

Organization of the Administrative Staff

Canadian Manufacturers' Association



THE relationship of the Executive Committee of the Association to the administration of the Association is defined in the Association's by-law No. 22 as follows:—

"The Executive Committee shall deal with all questions relating to the business management of the Association's affairs. It shall provide the Association with suitable head and branch offices, and shall lease and equip same at its discretion. It shall engage the salaried officers and shall advise and instruct them in their work. It shall require them to be bonded in such amounts as it may deem necessary for the protection of the Association, and may at its discretion dispense with their services. It shall cause to be prepared the estimates for each year's work; all applications for appropriations shall be made in the first instance to it, and no expense or liability shall be incurred in the name of the Association without its consent."

The Central Executive Committee consults the Division or Branch Executive Committees in regard to the administrative arrangements of Divisions and Branches.

The General Manager is the senior officer of the administrative staff and all other members of the administrative staff are subject to his direction. He is responsible to the Executive Committee which appoints him and defines his duties and advises how they will be carried out. The General Secretary is assistant to the General Manager. The managers of the administrative departments of the Association are directed as regards policy, by the Committees which supervise these departments. In administrative matters they are responsible to the Executive Committee through the General Manager.

The divisional staffs are directed in regard to divisional policies by their respective divisional committees. In regard to questions of administration they are responsible to the general Executive Committee through the General Manager. The same principle applies to branches. The Ottawa office reports to the General Manager.

The above chart illustrates this administrative plan and also shows the co-operation between the Head Office departments, the Ottawa Office and Division and Branch Offices.

Parliamentary Proceedings at Ottawa Reviewed

Opening Days of the 1922 Session occupied with lengthy debate on Speech from the Throne, which covers a wide range of topics. Few Important Developments up to end of March.

By Industrial Canada's Special Correspondent

THE smoke of the great political battle of December 6th having cleared away, the three armies under their leaders King, Meighen and Crerar, assembled on March 8th on Parliament Hill at the call of Baron Byng of Vimy.

History mentions the Long Parliament and the Short Parliament,—this is the New Parliament. There is a new Governor-General, a new Speaker, a new Premier, a new Leader of the official Opposition and over one hundred new members, including Miss McPhail, the first of the female sex to grace the chamber of the House of Commons.

To make even passing reference to the many doughty warriors who bit the dust on nomination and election days and who consequently are now conspicuous by their absence, would make this article savor too much of a composite obituary notice but it needs only a glance from the gallery, to bring home to an observer, the hazardous nature of a political existence and the high mortality amongst those who follow that career. On the back benches new faces are legion; even on the front benches are many making their initial bow in the Dominion arena, whilst a small number only are discernable of those who, after suffering compulsory retirement, have performed the difficult feat of making a political "come back".

Politically, the house by provinces, is divided as follows:

	Liberal	Conservative	Progressive	Labor
Nova Scotia	16	..	..	..
Prince Edward Island	4	..	..	..
New Brunswick	5	5	1	..
Quebec	65	..	..	..
Ontario	21	38	23	..
Manitoba	2	..	12	1
Saskatchewan	1	..	15	..
Alberta	..	..	11	1
British Columbia	3	7	3	..
Yukon	..	1	..	..
Total	117	51	65	2

The Fourteenth Parliament is unique in the annals of Canada as the Government, although with a solid front from three provinces, is in an actual minority and is without any representative from one province, while the Conservatives are unrepresented from six and the Progressives from three provinces. A general facing an enemy divided into two opposing factions has reason to congratulate himself on the absence of unity amongst his opponents but, while this is the case at Ottawa, nevertheless Mr. King doubtless realizes now more fully than formerly the truth of the old adage, "Uneasy lies the head that wears a crown."

The first duty of the Commons was the selection of the Speaker and the choice fell upon the Honorable Rodolphe Lemieux, whose twenty-five years parliamentary experience coupled with his thorough and minute knowledge of the rules and procedure fits him admirably for the position of "First Commoner". He has always been a keen student of parliamentary practice and constitutional government here and in the Motherland and the knowledge thus acquired will be invaluable in the performance of the onerous duties now undertaken. A statesman's name sometimes attaches itself in the popular mind to legislation which he has fathered; this is true in a marked degree in connection with two past activities of the new speaker; the "Industrial Disputes Act" is almost invariably spoken of as "The Lemieux Act" and the agreement with Japan, limiting the yearly arrival of Japanese laborers in Canada, is generally referred to as the "Lemieux Agreement" but it is as a staunch and able defender of his party and as a severe and frequent critic of his opponents that Mr. Lemieux will be remembered. By those whose inclinations or duties call them to the Commons Gallery his eloquence will be missed now that he has, in his own words,

> "Ceased to be a party man to become the servant of the House and in a broader sense the servant of the country,"

in which duties according to his announcement he will endeavor,—

> "in the administration of the rules of the House and in the interpretation of the constitutional usages to maintain and preserve those traditions, customs and privileges, and above all, that freedom of speech and that dignity and decorum in debate which have come down to us through precedent and precedent from the Mother of Parliaments the British House of Commons."

Following the custom adopted two years ago, we have arranged for the preparation of a series of monthly articles, interpreting the proceedings at Ottawa from the standpoint of the Canadian manufacturer. These articles will appear during the course of the session, which opened on March 8. The first one is largely introductory in character and reviews the work done up to March 28. We trust our readers will follow these articles carefully from month to month.—The Editor.

In the Speech from the Throne a forecast was made of an "early" and "substantial" revival from the period of economic disturbance and industrial depression coupled with a statement that unemployment due in part to the war justified federal financial assistance during the winter months. Announcement was made that the Government would renew efforts to secure desirable immigration and was endeavoring to extend markets, reduce freight rates, and increase efficiency by co-ordinating the Government railway systems. Parliament was told that it would be consulted in connection with some of the problems of the soldiers civil re-establishment and would be asked to approve of the Washington Treaties regarding limitation of armaments. Reference was likewise made to the Prairie Provinces' demand for their natural resources, to the appointments of delegates to the forthcoming Genoa Conference and to the sending at a later date of representatives to discuss with United States authorities all phases of postal matters.

The only direct announcements of impending legislation contained in the Speech from the Throne were that a bill would be presented placing under one ministerial head the various defence forces of Canada and that Parliament

> "will be invited to consider the expediency of making some changes in the Customs Tariff. While there are details of revision, the consideration of which will require time and care that are not at present available, there are features of the tariff which it is felt may properly be dealt with during the present session."

The debate on the Speech from the Throne commenced on Monday March 13th, and continued un-interrupted until its adoption on the evening of Thursday, March 23rd, during which time 53 speakers including the three leaders participated; of the speakers 18 were Liberals, 15 Conservatives, 18 Progressives and 2 Labor.

The field covered during the debate was wide, more or less attention being given to practically every question affecting Dominion, Provincial and even municipal affairs of the country; tariff, taxation, immigration, the railway policy, the transfer of natural resources to the Prairie Provinces, prohibition of oleomargarine, alteration to the banking system, and proportional representation, all came under review. No desire was apparent on the part of members to furnish the Finance Minister with suggestions as to how the much needed revenue could be obtained, but the Leader of the Progressives did criticise the Sales Tax, which he claimed pressed unduly heavily upon those whose total income must be spent on the necessities of life; he likewise found fault with the selection of Sir Charles Gordon as Canada's representative at Genoa, stating that:

> "Sir Charles Gordon is well known as a high protectionist, and I feel that whatever influence he will have in that conference will be exercised along the line of maintaining those artificial barriers between nations, which, after all, in the long run are one of the greatest causes of international misunderstanding."

Owing possibly to the short time the new Government has been in power, the order paper has been cumbered to a less extent than usual with queries for information on matters of public interest. In reply to a question, Mr. Fielding informed the House that for the fiscal year ending March 31, 1921, $40,481,401.25 had been collected under the Business Profits War Tax Act, and $46,381,806.64 under the Income War Tax Act, 1580 persons having been employed in the work, entailing an outlay for salaries and expenses of $1,709,584.20. The Minister of Customs and Excise in answer to a question, said that since its inception in June, 1920, the Sales Tax had yielded a revenue of $94,223,145. Another answer stated that the coal royalties on Dominion lands from April 1st, 1906 to March 31, 1921, had amounted to $1,833,071.71, while, during the same period, the royalties on coal taken from school lands in Saskatchewan and Alberta totaled $183,819.68. The Secretary of State announced that to November 30, 1921, Germany had paid to the Allies $1,528,912,000 of which Great Britain in cash and transfer of property received $111,860,000 while the Canadian Government had received $6,314,500 from the British Government towards the cost of the Canadian Army of Occupation, but that with this exception Canada had received nothing in the shape of reparation payments.

The Minister of Railways announced that out of the Dominion Government Good Roads Grant, $1,317,508.61 had already been paid to the Province of Ontario.

Mr. Church was told that it is not the intention of the Government to introduce legislation requiring uniform action on the matter of daylight saving, but that the Government in regard to its official service will adapt itself to the determination of each local community, while Mr. Kay on the order paper gives notice of his desire for the introduction at the present session of legislation to prohibit the adoption of daylight saving time in any part of Canada.

Resolution on British Preference

Mr. Hance Logan has a resolution that the British Preference should be confined to goods brought into Canada through Canadian seaports.

Mr. Church proposes that the United States Government be asked to join Canada in making an international agreement for carrying out the work on the St. Lawrence River Waterway recommended by the International Joint Commission.

Mr. Irvine proposes that a Parliamentary Committee should investigate the basis, function and control of financial credit and its relation to industrial problems, while Mr. Stevens wishes referred to the Committee on Banking and Commerce the improvement of Government inspection of banks and such changes in the Act as will provide greater protection to depositors, customers, share holders and others doing business with banks.

The re-establishment of the Canadian Wheat Board was recently urged upon the Government by a delegation of the Canadian Council of Agriculture. On motion of Mr. Motherwell this subject was referred to the Select Standing Committee on Agriculture and Colonization.

The only bills of public importance as yet introduced in the House of Commons are two by Mr. Woodsworth, the Labor member from Center Winnipeg, to repeal 1919 legislation, the effect of which he claims,

"was to deprive those who are not born in Canada of the right to trial by jury and to subject them to deportation without trial."

In the Senate two bills of public importance have been introduced, one by the Hon. Mr. McMeans to extend the right of appeal from convictions for indictable offences, and the other by the Hon. M. Bradbury, to amend the Cold Storage Warehouse Act.

The estimates as tabled show a reduction of $138,000,000 as compared with last year; the official Opposition were unwilling to regard this reduction as evidence of economy on the part of the Government, claiming rather that the reduction was possible merely on account of the heavy expenditures of former years, which obviated the necessity of like expenditure during the coming year. No provision is made for the erection or equipping of quarters at Ottawa for the Bureau of Scientific Research, but there is a vote of $120,000 which, being the same as the amount voted last year, will enable that body to carry on to the same extent as it has since its inauguration. The estimates also include an item of $50,000 for an exhibition train of Canadian products to France.

The statement of the Honourable Mr. Kennedy on the railway situation is eagerly awaited, as is the Hon. Mr. Fielding's Budget Speech, which "guessers" say will be delivered about April 20th.

Montreal Export Club Hears About Packing

At the meeting of the Export Club of Montreal and District held at the Old Colony Club in the Windsor Hotel, Friday evening, March 4, with the president, F. R. Whittall in the chair, an address was given by Douglas S. Cole, Junior Trade Commissioner in the Commercial Intelligence Department at Ottawa, who spoke on the proper packing of goods for export. Illustrating this, several films supplied by the Government were shown. The films giving photos of actual shipments showed the result of proper and improper packing. By this method of instruction it was clearly seen that boxes, crates, etc., for shipment in this country and to a foreign destination must be strongly and scientifically constructed to withstand the hard usage they receive in transit.

A film which had been taken in various Montreal factories was shown, explaining how export traffic should be handled. How Brown & Co., received an order for canned goods from South Africa, which they filled from poor quality material and from old stock on the shelves; goods poorly boxed and faultily billed. A similar order received by Raleigh & Co., was filled from best quality material, cans nicely labelled and shipment properly boxed and billed through to destination, with the result that Raleigh & Co., received repeat orders while the Brown Company did not.

Two additional films were shown exhibiting the power developments at Shawinigan Falls and other points on the North Shore of the St. Lawrence. A feature that these films emphasized was that both the films and the machine projecting them had been made in Canada.

Attractive New House Organ Issued

Municipal Improvements is the name given to a new monthly house organ issued by the Canadian Cement Company, Limited, Montreal. The first number which appeared in March is an extremely fine piece of work. It contains articles on the Chippawa Power Development, the Hunter Street bridge at Peterborough, Ontario, the Maryland Street bridge at Winnipeg, and several other recent public works in which concrete has been one of the chief materials. The articles are well illustrated by photographs and diagrams which add to the general attractiveness of the publication.



The Mackenzie King Administration

(From Photograph taken on the day the Members of the Cabinet were sworn in)

Standing from left to right,—Hon. James Murdock, Minister of Labor; Hon. Jacques Bureau, Minister of Customs and Excise; Hon. W. C. Kennedy, Minister of Railways and Canals; Hon. George P. Graham, Minister of Militia and Defence; Hon. Hewitt Bostock, Minister without Portfolio; Hon. W. S. Fielding, Minister of Finance; Hon. James Robb, Minister of Trade and Commerce; Hon. W. L. Mackenzie King, Prime Minister; Hon. Daniel D. Mackenzie, Solicitor-General; Hon. Charles Murphy, Postmaster-General; Hon. Sir Lomer Gouin, Minister of Justice; Hon. A. B. Copp, Secretary of State; Hon. Ernest Lapointe, Minister of Marine and Fisheries; Hon. Dr. H. S. Beland, Minister of Health and Soldiers' Civil Re-establishment; Hon. W. R. Motherwell, Minister of Agriculture; Hon. R. Dandurand, Minister without Portfolio; Hon. Charles Stewart, Minister of the Interior, Immigration and Colonization; Hon. T. A. Low, Minister without Portfolio. Hon. Dr. J. H King, Minister of Public Works and Hon. J. E. Sinclair, Minister without Portfolio do not appear in the group.

Cost Cutting for Industrial Power Plants

How to Discover and Correct Boiler Plant Waste

By David Moffat Myers

THE Science of Navigation is based upon a knowledge of astronomy involving deep study and application of the higher mathematics. Yet a man may safely navigate his vessel over the seven seas with no knowledge of these intricate sciences beyond his ability to apply simple arithmetic to a set of specific problems. This has been made possible by scientists, astronomers, and mathematicians, who have tabulated and formulated and charted their knowledge to a point where the mariner may navigate by simple rule of thumb. This is truly a marvelous accomplishment. It has rendered this wonderful science useful to humanity in general where it would otherwise have remained in the exclusive possession of the philosophers and scientists.

The sciences out of which have grown our knowledge of the generation and application of heat and energy are equally complex. Yet it is possible to deduce and set forth in a simple manner certain specific "rules" whose application to the management of industrial power plants will generally keep them from running afoul of the rocks of economic distress. This does not mean of course that there are not numerous occasions when the practical mariner finds it wise to take on a pilot.

It is with this idea therefore of giving practical information to plant managers that I have undertaken this writing. The extent and thoroughness of its application will measure its success in units of service.

The reader is respectfully requested to read the title of this article again and to notice it refers to cost *cutting*, not cost *finding*. A stupendous amount of money and effort are expended annually in the industries in cost *finding*. If one half the equivalent energy were directed towards cost *reduction* the direct result would be millions saved in operating costs. A vast amount of cost finding brings no results whatever in cost cutting.

Consider your annual coal bill for a moment. Take 10 per cent of this amount. Take 20 per cent. Would you like to add something between these two figures to your profit account? Would you do it if you knew it could be done without necessarily installing any new equipment such as boilers, stokers, draft apparatus, engines, heating systems, etc., in other words with your existing plant?

Well, the interesting fact is that you can do this very thing,—unless you are the one rare exception in a hundred. If you happen to think that you are that exception, would you be able to prove it? Probably not. And if you could not absolutely prove it the answer is you would be mistaken. For unless a management absolutely knows the results that the plant is giving this essential lack of information constitutes prima facie evidence that a quite unneccessary and substantial waste exists in place of definite knowledge. Deduction: *If you do not know what results your plant is giving you may be certain the results are sub-normal.*

I have been in many plants where the management *thought* it knew. But an examination proved it did not. They thought the plant performance was good, but examination showed it to be bad with attractive possibilities for making money. For what after all is the distinction between making money and saving money? My old Professor used to say that mechanical engineering was "the art of making money". After twenty years of practice and observation in the power plants of the industries, I know he was right. For I have seen two and three kilowatt-hours grow where only one grew before, and I have had the pleasure of making one boiler do the work that two did before, and at the same time the steam production per pound of coal jumped from six pounds to nine pounds. And I have had the fun of taking the job away from the expensive live steam and making the wasted exhaust steam do the same work and do it better. Yes, the professor was right. For in every case the fuel and labor, and therefore money, saved were very large in proportion to the money spent to gain the result. The capital laid out in the form of plant improvement paid dividends so high that I almost fear to record them. One hundred per cent per annum is not unusual with good engineering; whereas dividends of twenty five to fifty per cent are a regular part of the day's work. I could tell of one investment of $880,000 which drew dividends at the rate of $1,000,000 per year. These all involved the layout of some capital and the purchase of improved equipment, but they go to show the opportunities that exist, all over our industiral country, for the plant owner who desires a high paying investment with low risk. For the money making is under his own control.

By the kind permission of the Editor of INDUSTRIAL MANAGEMENT, we are enabled to give readers of INDUSTRIAL CANADA the benefit of the information contained in this valuable article by Mr. David Moffat Myers. Mr. Myers is an outstanding authority on power plant engineering and during the war acted as Chief of the Fuel Engineering Division of the United States Fuel Administration, in which capacity he built up the state organizations that effected an annual saving of 25,000,000 tons of coal. His article deals with a subject of great importance to all manufacturers who are anxious to eliminate all forms of waste in factory operations.

—The Editor

But there is another method of making money which pays still higher rates of interest. For instance the record I quoted of the plant that was made to increase its steam out-put fifty per cent. per pound of fuel on half the number of boilers. In that case there was no investment whatever on the part of the owner. This happened in a very small power plant, and was accomplished simply by changing the method of operating the boilers. The better results were then made permanent by installing a water meter feed line, counting standard wheel barrows of coal, and interesting the Engineer through an increase in pay to keep the performance up where it belonged. All this came about from finding out in the first place what results the boilers were actually giving. Enough coal had been needlessly wasted in the previous 12 years to run the whole plant for four years without buying any coal. This condition is more usual than unusual in the small plants of today and the vast majority of industrial plants are small. But the big ones are by no means exempt, as I have found 5000 to 10000 H. P. plants giving about the same results.

Right methods and a simple common-sense system have worked wonders where they have been applied. The method and the system must both be right and can be right only when based upon a thorough knowledge of plant practice and operation. The details of method and the system are different in almost every plant, for unless they conform harmoniously to both the human and the mechanical conditions, especially the human, they will not bring the desired results. To apply to a little two boiler plant the system and methods suitable for a ten or twenty thousand horsepower plant would be as impractical as to reverse this plan. Disregard of this principle by overenthusiastic or inexperienced engineers has led to a feeling among owners that methods and systems in the boiler plant do not pay. But that is because their experience has been with unsuitable plans badly applied and usually much too elaborate. The result has naturally been a failure.

But to return to good engineering methods. I have now in mind the case of another plant of about 1000 horsepower. Here the design and equipment were excellent and well adapted both to the factory conditions and to the fuels available. The management too was far superior to that found in the average plant of like size. Yet the installation of a very simple system with a bonus attached for good performance is saving that firm about $7500 per year.

Such cases are directly in line with the present subject of cost cutting, but getting the most out of existing plants. Most plants are operated blindly. No one knows what results are being secured, for the plant has no eyes. The installation of eyes, when these or instruments are properly specified for any given set of conditions, almost inevitably shows results to be subnormal and also indicates not only to the management but to the engineer and firemen as well what needs to be done to stop the waste. Then if the engineer and firemen *want* to stop the waste it will be stopped. Part of the duty of the management is to furnish this incentive, this desire to save for the company. One good way is to make the operative share in the profits which are due to their increased watchfulness and care. In this last example quoted, the improvement was primarily due to finding out in the first place what results the plant was giving. Eyes were installed in that plant. The management saw, and the engineer and firemen saw, the results which were formerly invisible.

The operating engineer in this plant recently told a friend of mine that his share of the bonus kept his automobile supplied with gasoline. Not long ago a recorder got out of adjustment. The engineer and one of the firemen set to work on their own time and put it in order so that the saving to themselves and to the company might suffer no interruption. There has been no such thing as labor turnover in this fireroom since the system was put in operation several years ago. How many businesses have been saved from ruin at a critical period by

application of proper method and system? Give a thought to the long neglected steam making business.

If you should describe to me the design and layout of your boiler plant and specify the fuel you are using I could tell you what results you should be able to get; but unless you are the rare exception I have mentioned, you will not be able to tell me with any degree of reliability what results you are actually getting and prove it. Consequently you would be operating blindly and wasting, wasting, wasting, instead of cost cutting and economizing like a good citizen and a good business-man.

But since it should interest managers to know what are the standards of good operation in their boiler plants I have made up a table showing good normal results for various conditions of plant design and operation. These figures are not theoretical, but are on the other hand actually attainable in every day operation in factory power plants where intelligence and good operation prevail and when results are known. It will be a good game, and a very profitable one, to determine how closely your results check up with these. If you don't know or can't find out, you can safely class your plant as needlessly wasteful, and then you can prepare to take the next logical step, providing you are interested in cost cutting.

Standardized Results for Hand Fired Boilers

Attainable efficiencies are 65% to 70% which give the following evaporations per dry pound with coals of the following heat values:

With Coal of	12000 B.T.U.	13000 B.T.U.	14000 B.T.U.
Efficiency, 65% equivalent Evaporation	8.04 lb.	8.71	9.38
Efficiency, 70% Equivalent Evaporation	8.66 lb.	9.38	10.10

Standardized Results for Stoker-Fired Boilers

Attainable efficiencies have a wider range varying with quality of coal, rating at which boiler is driven, size of units, load factor, etc. This table is limited to the more usual factory conditions.

For units of 300 to 600 H. P. at ratings of 150% to 200% nominal capacity.

With Coal of	12000 B.T.U.	13000 B.T.U.	14000 B.T.U.
Efficiency, 68% Equivalent Evaporation	8.41	9.11	9.82
Efficiency, 76% Equivalent Evaporation	9.40	10.18	10.97

Study these standard results which show what you ought to be getting out of your coal. If you do not find the coal of the same heat value as that which you are burning, then consult the efficiency chart on this page. For instance, if you have a hand fired plant and coal of 13500 B. T. U. you should be obtaining 65 to 70 per cent. of the value of the coal in the form of steam according to the foregoing standards of operation. For this coal the chart shows your equivalent evaporation should be between 9.05 lb. and 9.75 lb.

From the foregoing information you can find out in five minutes what results you ought to be securing from your boiler plant providing you know the heat value of the coal you are buying. So far this is simplicity itself and it does not require an engineer to make the computation. Standards in other departments of production are not so easily and definitely determined, yet the boiler plant is the last department of all to receive any analytical attention. And that is the reason why the steam factory is wasteful and why today when owners find it imperative to cut costs of operation, this almost untouched field offers very attractive dividends in return for a moderate amount of brain power deftly applied.

Determining Performance

There are two methods of determining performance. One is to make a 10 to 24 hour formal boiler test. But this is what happens. Although you may particularly request the boiler room operatives to do the same as usual in every matter of firing practice and operation it inevitably occurs that every man-jack of them is right on his toes to show the company what a mighty good fireman he is, and he would not be human if he did not hope the management would believe he had shown truly his every-day efficiency. He sometimes believes it himself. It is my personal belief based upon long observation and upon some actual tests with this very psychological question in view, that results thus obtained range from 10 per cent. to 20 per cent. better than in daily un-watched practice. I have some real figures in support of this and in addition I recall two incidents which will go far to demonstrate its truth. In one very crude plant we started merely counting the wheel barrows of coal to the fireroom and chalking the number each day on a blackboard in the fireroom. We had a clerk from the office go to that board at the end of each day and copy the record in his notebook. Nothing else was done, *but the coal consumption dropped off five per cent.*

The other case was more striking for I did nothing whatever to the plant—that is, nothing visible or audible. I had been retained to study the steam and fuel conditions and for the first few days had walked about the property inspecting and acquiring information. I had of course closely observed conditions and practice in the boiler plant but had not questioned the firemen or made any comments or suggestions. At the end of these few days, about five, as I recall, the superintendent told me I had better stay with them permanently, since the daily coal consumption had dropped some six to seven per cent, since I had been on the premises. So much for the psychology of the coal bill, though it is only the beginning of a very big subject, and could, I believe, be shown to be the biggest factor of all in this whole problem of cost cutting.

For the moment let me emphasize the difference between the results of "a boiler test" and the results of every day practice. A formal boiler test has its own highly valuable uses and appropriate applications, but it is with every day operating results that we are especially concerned in the present situation. But also, in passing let the psychology factor be carefully noted in this respect. Watchfulness, care and interest on the part of the management is instantly reflected in the same qualities on the part of the firemen and engineer. Remove these qualities and as far as economy is concerned your boiler plant will promptly go to the dogs, where the majority of them are now.

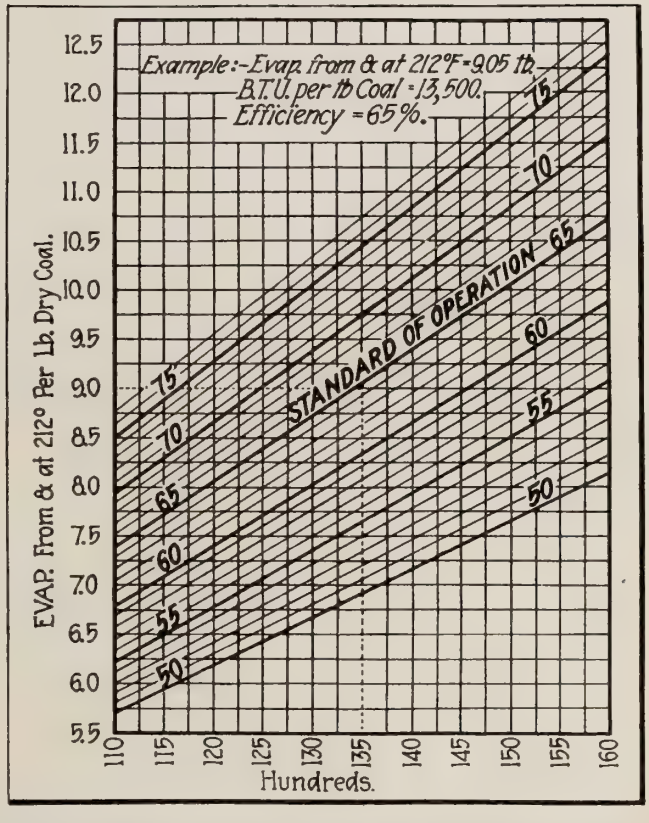


Chart showing relation of evaporation to B.T.U. content of coal at various operating efficiencies

Every Day Results

The next concrete question is how to determine your every-day results in the boiler plant. This depends upon the design of the plant and its human equipment, and as I have said before, *especially* its human equipment. Simplicity is essential in any system and utmost simplicity is essential in the small plant. But even in the small plant, if at all

feasible, daily records of coal and water should be secured. Feed water temperature comes next and steam pressure is almost always known closely enough. These four items combined with an occasional determination of the heat value of the coal make it possible to know very closely the operating efficiency of the boiler and furnace equipment. You may then compare your results with the standard I have given, and you will know not only where you stand but you will also know how much coal you save by adopting right methods.

The recommendation is to secure a measure of the input (coal) and a measure of the output (steam or water made into steam). Since some coals are worth more than others a higher evaporation is expected, so you must know how much heat a pound of your coal contains. Also since the heat to make steam depends upon the temperature of the feed water and the pressure of the steam these two figures are required. One more simple thing you need to complete your determination of performance. If you will refer to the foregoing efficiency chart you will note that the term "equivalent evaporation" per pound of coal is used. This is simply the actual evaporation multiplied by a factor depending upon feed water temperature and steam pressure (and superheat if any) and this factor can be picked out of the table of Factors of Evaporation published in Kent's or any other handbook of mechanical engineering. With the table of standard I have given with the Efficiency Chart you will be able to compute your own boiler performance within a close range of accuracy.

Application

For the moment let us assume you have followed directions and have found your equivalent evaporation to be 7.37 lbs. per lb. of coal of 13000 B.T.U. Refer to table of Standardized Results for Hand Fired Boilers on last page and note you should be getting 8.71 lb. to 9.38 lb. Now assuming some considerable handicap for your plant let us compare with the lower figure of 8.71. This means each pound of coal should produce 8.71—7.37=1.34 lbs. more steam. Your possible gain will therefore be $\frac{1}{7}\frac{34}{37}$ or 18.18 per cent. more steam from the same coal. Or if you wish to make the same amount of steam as before you can do so with a saving of $\frac{1}{8}\frac{34}{71}$ or 15.38 per cent. of your coal bill. Thus you can with the help of the "Standard Evaporations" and "Efficiency Chart" see for yourselves very easily and quickly just what it would mean financially to improve your evaporation from one point to another. The efficiencies from the chart can be used in place of the evaporations for these simple computations if preferred. Thus increasing the effciency from 55% to 65% will result in a gain of $\frac{6\,5\cdot5\,5}{5\,5}$, or 18.18 per cent. more steam from the same coal. Or $\frac{6\,5\cdot5\,5}{6\,5}$ or 15.38 per cent. less coal for the same amount of steam.

Incidentally the lower figures used represent the conditions actually existing in most hand fired plants, although a great many are considerably lower and therefore susceptible to greater improvement. If we used the higher instead of the lower standard result the possible gain would be still greater.

The most interesting comment at this juncture is the statement previously made. Unless there is something radically and unusually wrong in the design of the plant, the "Standard Results" quoted can be secured without changes in the design of the plant. In other words these pleasing economies can be secured by the application of right methods and correct system. The first step then is to determine your present results.

Anti-Trust Law and the Fixing of Prices

A Review of the Situation as it has been affected by recent legal decisions

By H. Macdonald
Legal Secretary, Canadian Manufacturers' Association

PERTINENT to the decision of the Privy Council delivered the 11th November, 1921, in the Canadian Combines and Fair Prices Act and the Board of Commerce Act, 1919, (both of which were held to be ultra vires of the Canadian Parliament) a ruling of the Supreme Court of the United States, published on December 26, declaring the open competitive plan of the unincorporated American Hardwood Manufacturers' Association, providing for interchange of price and market data, a restraint upon trade and a conspiracy to maintain high prices in violation of the Sherman Anti Trust Law, is one which is of vital interest to all producers.

Under the plan the Secretary of the Hardwood Manufacturers' Association was required, inter-alia, to send (1) a monthly summary showing the production of each member; (2) a weekly report giving each sale and price; (3) a monthly report showing the individual stock on hand of each member; (4) a monthly summary of the price lists furnished by members showing prices asked by each; (5) regular meetings to afford opportunity for the discussion of all subjects of interest to the members.

It was held by the Supreme Court of the United States, affirming the decree of the District Court, that this constituted a combination and conspiracy in restraint of interstate commerce within the meaning of the Anti-Trust Act of 1890. Thus we have it authoritatively held by the U. S. law in the circumstances of this case, that the dissemination of information as to business conditions such as would place the small producer more nearly upon a footing of equality with his larger competitor, and give him the information he needs to protect both himself, his employers and his customers, as well as his banker from the bad effects of over-production and irregularity in industry, are illegal, and that freedom of discussion, even among traders, is denied.

It should surely be possible to apply some reasonableness of judgment even upon attacks upon combination or what is alleged to be such.

As we glance over the whole development of judicial interpretation of the Sherman Act, we cannot, however, fail to note a pronounced trend toward an increasingly broader application of its terms. At the same time, the net practical results attained during a period of thirty years by prosecution under the federal anti-trust acts, and by action of the courts have been, on the whole, one-sided, and have failed to satisfy public opinion.

As far as the American people were concerned, the "trust" question, prior to the war, was a domestic problem exclusively. It is that no longer. Commercial relations with foreign nations have undergone a fundamental change since the out-break of the war and the restrictive law applied to domestic business cannot be successfully applied to export trade. Accordingly it was felt that under prevailing conditions, the small individual American manufacturer was at a disadvantage over against his foreign rivals in oversea markets. So two laws were passed in 1918, to promote the export trade of the United States, the Webb Act which legalizes export combination and the Edge Act which provides for banking corporations organized for the purpose of foreign financial operations.

The significant point is that both laws permit the promotion of combinations for engaging in foreign trade, and to this extent amend the Sherman and the Clayton laws, showing also a distinct tendency towards expanding the trust policy in the United States in accordance with its broadened interests in world trade.

The following forceful statement is embodied in the report of the Committee in Trusts of the British Ministry of Reconstruction.

> "The conclusion to which competent critics are forced is that anti-combination laws have proved thus far worse than futile. They have produced interminable litigation which had led no where; by making combinations of independent manufacturers criminal conspiracies, they have encouraged the fusion of firms into great amalgamations; and they have driven combination underground where its worst qualities have thriven, and its best qualities declined."

From the first, public opinion in Canada seems to have realized that the problems of industrial combinations involved not exclusively legal but also economic questions. The Combines and Investigation Act of 1910 provided for the investigation of combines, monopolies, trusts and mergers, for enquiry by a Board of investigation and for report to the Minister of Labour which should be published in the Canada Gazette, offenders against the Act being liable to a penalty not exceeding $1000 and costs for each day from the date of the publication of the report.

The Combines and Investigation Act, 1910, is wholly repealed by the Combines and Fair Prices Act, 1919. The Combines and Fair Prices Act and the Board of Commerce Act were by the judgment of the Privy Council delivered on 11th November, 1921, declared ultra vires of the Dominion Government. Thus civil legislation on the subject of price fixing in Canada is wholly eliminated, (without prejudice, of course, to the doctrine of restraint of trade violating public policy) the credit for which is largely due to the vigorous policy pursued by the Canadian Manufacturers' Association in the interests of commercial freedom.

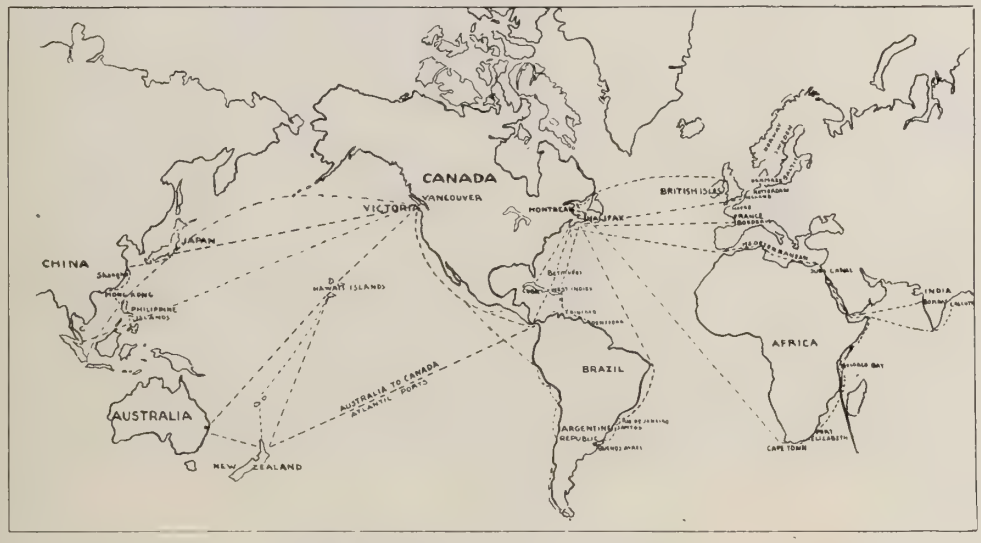
So far as Canada is concerned, we have every reason to feel satisfied with our immunity from restrictive commercial and industrial legislation, believing that our country's interests will be best served by allowing the process of industrial reconstruction to proceed according to the free economic law of supply and demand. Apart from the essential differences in the conditions in the United States and Canada, everything possible should be done to maintain a free hand in the matter of combined and concerted effort to those who shall undertake the essential enterprise of building up Canadian industry at home and abroad. Experience has shown time and again that situations and conditions growing out of and responsive to great economic laws cannot be met by mere judicial fiat.

Canada's Progress in the Building and Operation of Ocean Going Shipping

By William Lewis Edmonds

WHILE it may not be possible, owing to world-wide adverse conditions obtaining, to perceive promising prospects in the immediate future for either the shipbuilding industry or the ocean shipping trade of Canada, one can from a retrospect of the development which has taken place in these two important branches of the country's activities during the past few years gather much that is encouraging.

It may not be possible in the process of retrospection to discover ways and means that will lead even to a modification of the adverse conditions at present obtaining. That is something that can only be accomplished by the return of the trade and commerce of the world to a more normal condition. But by applying our mind to the task of studying the developments which have taken place in both the shipbuilding and the shipping industries during the past five years we are brought to the realization of at least two outstanding facts. The one is that during that period the Dominion has proved its ability to rank as one of the world's important shipbuilding countries. The other outstanding fact is the enhanced position Canada has taken among the world's mercantile marine powers.



Ocean Shipping Routes from Canadian Ports

Prestige of Bygone Days

Canada began to build ocean-going vessels away back in the early days of the French Regime, and for a generation or two before the advent of iron-constructed steamers the clipper sailing ships built in Canadian yards of timber obtained from the country's own forests were the pride of the ocean in respect to both quality in construction and speed in sailing.

"The builders in the ports of St. John, N. B., and Quebec," wrote an English authority in Blackwood's Magazine of July, 1854, "have of late been producing ships whose performance at sea have not been surpassed by those either of the mother country or of the United States, which pride themselves upon the quality of their clipper vessels."

Some conception of the extent of the wooden shipbuilding industry of Canada before steamers of steel construction cmae into general use may be gathered from the fact that in 1875 the new tonnage built in the yards of the Dominion aggregated 188,098 tons, a total which was not equalled even during the extraordinary expansion experienced in the building of both steel and wooden vessels during the past four or five years, the nearest approach to it being 164,074 tons, which was in the fiscal year 1918. The most marked decline in the country's shipbuilding began in 1880, when the tonnage constructed was 68,756 tons. From that time unward the decline was almost persistent, until in 1896 it touched the minimum with 10,753 tons. Later years showed some improvement, attaining to nearly fifty thousand tons in 1908, only again to decline, and dropping to 13,497 tons in 1916.

Comparison of Five-Year Periods

It was not until 1917 that the effect of the demand upon Canadian shipbuilding yards for vessels to replace those being sunk by German submarines began to manifest itself, and even in that fiscal year the total tonnage constructed was but 28,638 tons. The following year it got up to 53,912. And then the program adopted by both the Dominion Government and the Imperial Munitions Board came into operation, with the result that in 1918 a total of 104,444 tons was constructed and the following year 164,074 tons. Construction for the fiscal year 1921 was 95,838 tons.

Taking the last five fiscal years as a whole, the tonnage constructed in the shipyards of the Dominion aggregated 446,906 tons, compared with 161,495 tons the five preceding years, an increase for the former over the latter period of more than 176 per cent.

A further striking feature in respect to the experiences of the past five years is that during that period the Dominion sold to other countries vessels to the value of $50,617,808, an increase over the previous five-year period of $48,353,665. In 1920 alone the value was $17,819,477, while the highest during any one of the five years ending 1916 was $1,150,950, which was in 1915.

Canada's Mercantile Marine

With the world's maritime countries possessing for the time-being an over-supply of mercantile marine vessels, it naturally follows that for the next few years at any rate the shipbuilding industry of the Dominion will experience a marked decline in output. Possibly, however, a certain measure of satisfaction may be obtained from the fact that, having the yards and the experience of steel shipbuilding, Canada will occupy a much more favorable position in respect to the industry than she did five years ago.

But if the outlook for the shipbuilding industry for the next few years is anything but bright, Canada is much more self-contained in respect to ocean shipping than she was when war broke out. The Government Merchant Marine alone has sixty-odd ocean-going steamers and with these, plus private-owned ships, Canada has been enabled to establish regular direct lines with many parts of the world that were hitherto practically inaccessible to the products of the farms and factories of the Dominion.

As a result of this expansion in mercantile marine facilties, vessels carrying the Canadian flag now regularly push their prow into the principal ports of England, Scotland, Ireland, France, Norway, Sweden, Denmark, Holland, Germany, Poland, Italy, South Africa, India, the West Indies Brazil, Argentine, Uruguay, Hawaiian Islands, Australia, New Zealand, Phillipine Islands, China, Japan.

The effect of this expansion in ocean shipping facilities is reflected in the tonnage of inward and outward-borne freight. example, vessels flying the Canadian flag carried in 1921 more of the inward-bound freight than they did in 1917 by 57.38 per cent., although there was a decrease in the period of 467,006 tons in the total quantity brought into the ports of the Dominion by the vessels of all countries. In outward-bound freight the increase in that carried in Canadian bottoms was ever greater, there being a gain of 61.69 per cent. during the four years. Including inward and outward-bound freight Canadian vessels in 1921 carried 2,152,991 tons of freight compared with 1,324,229 tons in 1917, an increase of 828,762 tons, or nearly 63 per cent., while the total carried in the vessels of all countries entering and leaving the ports of the Dominion decreased by 1,637,178 tons, or 13.63 per cent. during the period. Putting it another way, Canadian vessels carried in 1921 22.56 per cent. of the inward-bound freight as compared with 11.92 per cent. four years ago and 20 per cent. of the outward-bound as against 10.61 per cent. in 1917.

Two interences naturally follow from this expansion in the ocean shipping facilities of the Dominion. One is that greater means are afforded for reaching foreign markets with Canadian products. The other is that a larger proportion of the money paid in freight rates accrues to Canadian shipping enterprises—an important factor in international trade. Combining both factors, it is seen that Canada is to-day in a more favorable position with regard to ocean shipping than ever before in the history of the Dominion.

Income War Tax Act Requirements for 1922

Corporations, firms and individuals should keep in mind the duty imposed upon them by the provisions of the Federal Income Tax law to get from the Inspector of Taxation of their District the prescribed forms to be filled up, and lodged with the Inspector of Taxation in their District. The following are important dates to be remembered:—

March 31st—last day for Companies and employers' returns of shareholders and employees (Forms T4 and T5).

April 30th—Last day for return of income and payment of tax (one-fourth of it at least).

June 30th—Second instalment due.

August 31st—Third instalment due.

October 31st—Fourth and last instalment due.

It is not possible at this date to anticipate what changes, if any, will be announced in the 1922 Budget.

British Trade Ship Project is Postponed

The Association has been officially advised by British Trade Ship Limited, London, England, that their directors have decided to defer immediate active arrangements for the proposed voyage of the trade ship to various countries, in view of the present economic conditions.

The directors were also influenced by the fact that the British Empire Exhibition has been postponed from 1923 to 1924, and they thought it wise to defer the sailing of the trade ship from August 1923 to the following year.

The directors say that the project has in no sense been dropped, but that they think better results would be obtained by putting it through at a later date.

Plan Wool Mill for Winnipeg

An agreement between the government and Manitoba wool growers, whereby the government would guarantee or lend the wool producers $30,009 for the establishment of a mill for the manufacture of woollen goods in Winnipeg, has been prepared and was presented to the agricultural committee of the Legislature.

This step follows the presentation of wool producers' requests recently to the committee, for a loan to enable them to open a mill.

Promise of any security for a loan was made by the wool growers, and the nature of this probably will be decided by the Committee. If approved by the latter body, the agreement will be placed before the cabinet for ratification.

This, like many other matters, is held up by the turn which political affairs has taken in Manitoba, as mentioned on page 64.

British Trade Facilities Act

Under the British Trade Facilities Act which has been passed with a view to reducing unemployment in the United Kingdom, responsible Canadian Houses can obtain British goods on credit if they so desire. This act provides that the Treasury, after consultation with the Committee, has power to guarantee the principal and/or interest of loans for capital undertakings to be carried out in any country provided that the proceeds of such loans will be applied in such manner as to promote employment in the United Kingdom. It is pointed out in the act that amongst applicants who satisfy the Committee preference will be given "among applications from abroad to applications within the British Empire."

Consolidated Smelters Does Large Export Trade

The position of the Consolidated Mining and Smelting Co. of Canada Limited was outlined by J. J. Warren, the president, at a banquet of the Associated Boards of Trade of Eastern British Columbia, held at Nelson, B. C., on February 23. The gist of Mr. Warren's remarks was that the Company, early in 1921, had large stocks of metals on hand which they had a great deal of difficulty in financing: that metal prices had gone to pieces and that it was a question whether it might not be necessary to close the plant, clean up the stocks and liquidate the debts. It was decided, however, that, as progress was being made in reducing costs, especially by reason of the development of metallurgical processes, operations would be continued in the hope that costs could be reduced to a greater extent than the selling prices of products.

Canadian markets were almost negligible but *the company were able to open up sales agencies in the Orient and in Europe with very considerable success.* Stocks continued to increase until the last four months of the year, when the selling arrangements that had been made began to have effect and a large export business developed which reduced metal stocks to normal.

Costs have been reduced to some extent by wage revisions but more particularly by improved metallurgy and the company are now in a position to compete in any market, as a matter of fact, they are doing so. For some months to come it is probable that the bulk of the company's product will have to seek a market outside Canada.

The tonnage of the plant at Trail is being increased by an addition to the lead refinery increasing its capacity from 90 to 150 tons per day. The company have not so far purchased zinc ores from outside mines but are installing a special unit in the zinc plant for the purpose of handling customs zinc ores.

Appoint Sales Representative

The Kerr Engine Company, Limited, Walkerville, Ontario, manufacturers of Kerr Valves, have recently appointed William R. Stavert, 58 Manning Chambers, Toronto, their sales representative, covering territory from and including Hamilton, east to and including the Province of Quebec. Mr. Stavert will represent the company in the sale of their products in the territory mentioned, with the exception of their radiator valves and waterworks supplies which will still be handled from the office at Walkerville direct. Mr. Stavert was until recently manager of sales for Jenkins Brothers, Limited, and recently resigned to engage in business as manufacturer's agent.

B. C. Shingle Manufacturers Form Marketing Company

In an effort to stabilize conditions in the shingle manufacturing industry of Biritish Columbia, a company incorporated as the British Columbia Consolidated Shingle Manufacturers', Limited, capitalized at $600,000, has been formed to act as the marketing agency for the various shingle mills o the province. At the head of the new organization are W. S. Hunting and Charles E. Merritt of Hunting-Merritt Shingle Co., Limited; Robert McNair of Robert McNair Shingle Co., Limited and Norman R. Whittall, of Brooks, Bidlake and Whittall, Limited.

It is planned to stabilize prices in the industry for given periods, as well as to find markets for the output. In the past prices have varied almost from day to day, and one of the objects will be to keep these at a certain level for sufficient length of time, in order that contracts, more especially for large export orders, can be entered into.

At present about 95 per cent. of the output of the shingle mills of the province finds its way into the export market, and it is on that account, mainly, that the desire to bring about stability has been expressed.

A feature of the rules governing the management of the corporation is that it will be prohibited under its incorporation to pay a dividend in cash of more than 10 per cent. a year. Provision is made, however, that after the 10 per cent. dividend is paid and the directors think there should be a further division of profits, extra dividends may be paid by issuing more shares in the company to the stock holders.

RECENT INDUSTRIAL DEVELOPMENTS ILLUSTRATED



Enlargement of Waterloo Factory

Early in January a new addition was completed at the plant of John Forsyth, Limited, Waterloo, Ontario, which is shown above. This gives the company double the floor space of their original building and they have been able to increase their staff about 33% since the early part of December.

The Apple Industry of the Okanagan Valley

Remarkable Expansion of an Industry in which the mechanical devices of the up-to-date Manufacturing Establishment are utilized in the handling and packing of the product.

By R. M. Winslow

Secretary-Manager of the B.C. Traffic & Credit Association, Vernon, B.C.

AMONG the newest of the industries of Canada is that of fruit production in British Columbia. Only a few years since the supply of fruits for Western Canada came from the United States and Eastern Canada, and even as late as ten years ago, the total shipments of B. C. tree fruits amounted to only some two or three hundred carloads a year, valued at two or three hundred thousand dollars. Now, the prairies rely almost entirely on British Columbia for all fruits capable of being grown in the temperate zone, and in the last few years there has been a surplus, steadily increasing, for shipment to other markets.

British Columbia produces fruits of considerable variety; and practically every section of the southerly portion of the province excels in some one or more kinds of fruits. The apple industry of the Okanagan valley is, however, the largest most considerable branch of the industry, both in productive values and in prospects for further development.

In general, it may be said that the Okanagan valley produces three quarters of British Columbia's annual fruit crop and about eighty percent of the apples. According to the orchard survey conducted by the Provincial Department of Agriculture in 1920, there were a full million apple trees in the commercial orchards of the valley, while other fruits, including pears, peaches, plums, apricots, crabapples, prunes, etc. totalled three hundred thousand trees.

The rapid growth in production of apples in B. C. is well illustrated by these typical years since 1911:

1911	250,000 boxes
1913	477,000 boxes
1915	787,000 boxes
1917	1502,000 boxes
1919	2524,000 boxes
1921	3125,000 boxes

Despite this rapid growth, British Columbia is still second to Nova Scotia among the apple producing provinces of Canada, but considerably higher than Ontario.

What the future production will be is necessarily uncertain, but the orchard survey of last year showed that of the million apple trees in the Okanagan, only 34% are over ten years old, while 55% are only in partial bearing, and 11% too young to bear. From past performance, it is reasonable to expect that the crop five or six years from now will be about double that of 1921.

The creation of such an industry in such a short period implies unusual conditions surrounding its inception. The key of the situation lies in the fact that irrigation was necessary, and the construction of irrigation works, in the Okanagan, required that they be of considerable magnitude, involving large amounts of capital. This in turn required intensive colonization or settlement schemes, bringing to the land in the shortest possible time, enough settlers to put it immediately into cultivation. The climate and soil were there, the companies supplied the water, and secured the settlers, and within a few years land that previously had no value except for cattle grazing, was covered with thriving young orchards.



The Grading and Packing Operation

Scene in Vernon Fruit Union Warehouse during the apple season, illustrating the use of mechanical equipment.

That was the period of rosy hopes, a period in which the possibilities of fruit growing were described in immoderate or even extravagant terms; when the life of the fruit grower was pictured as a life of ease, and the returns from orchards would make the future a certainty.

Then came the period of disappointment; it took longer for the trees to come into bearing than was expected; the fruit growers found their capital insufficient for the long wait; winter freezes caused many losses; and the first few crops, in the years of 1910 to 1914, sold at less than the bare cost of production.

Since then, conditions have again changed. The orchards have come into heavier bearing; marketing organization has been created and brought to a considerable degree of perfection; prices have been better; and the district that was practically bankrupt seven years ago has become fairly established.

Now fruit production in B. C. has become one of the most scientific of all branches of agriculture in Canada.

Perhaps the most important and interesting development of the past few years has been in connection with the packing and selling of the crop. The apple grower rarely is the packer of his product; his connection with the apple, except as he may be a part owner of a co-operative packing and selling organization ends when he delivers the apples, loose in orchard boxes, at a packing house.

The packing houses, of which there are sixty in the valley, handling the products of three thousand orchards, receive the apples from the growers' wagons or trucks, weigh them and issue receipts for weight, grade and pack the fruit, warehouse it, and load it into cars. The grading and packing is a skilled and highly standardized process in itself, and is very largely responsible for the high reputation B. C. apples have secured for excellence. The standards in use are on the average distinctly higher than the legal minimum grades set by Dominion legislation. A staff of Dominion inspectors continually at work, see that the standard is maintained by every house, while some shipping organizations maintain inspection services of their own in addition.

Selling is distinct from packing, though many of the shippers carry both processes under a single organization. Rather over half of the total crop is packed and sold by co-operative organizations, entirely controlled by the growers. A trade association covers practically all shippers, both co-operative and independent; and the whole fruit crop of the province is handled on a more systematic basis than was thought possible even a few years ago.

With the increased crop, there have come grave problems of marketing. It had been thought that Western Canada would take all the apples British Columbia could grow or would grow for an indefinite period. Such has not however been the case. From 1919, the production has exceeded Western Canada's entire demand, and in the season just past, eighteen hundred carloads of apples, or 50% of the Okanagan crop, has been shipped to other markets, of which the United States and Great Britain are the most important.

If the crop is to double again in size in the next six years, it becomes very evident that the increase must largely or entirely be marketed away from Western Canada; and as a consequence, the fruit growers of British Columbia, within twenty years of the first inception of the industry, and within ten years of the first considerable crop being produced, find themselves bound to provide the machinery for marketing a perishable product, in competition with older and larger competitors in the Western States, in the open markets of the world.

This is the fourth stage in the development of the apple industry of the Okanagan. First, the planting of the orchards; second, the non-productive period while the trees were being brought into fruition; third, the period when home markets were developed; and now the stage in which the home market is outgrown, and the industry must capture its share of world markets. The first three stages have been passed, not without many trials and disappointments, but successfully; and we may hope that the industry may meet its future problems equally well, develop and establish world-markets, and so do well for Canada.

Further Encouraging Reports from Members of the Association

WAYAGAMACK PULP AND PAPER CO., LIMITED, THREE RIVERS:—"Our plant is now operating to capacity. Export demand for kraft paper has revived and prices show improvement."

STANFIELD'S LIMITED, TRURO, N. S.:—"We are running full time and orders are coming in in fair volume; in fact, the orders booked in January and February of this year are double those of 1921. We have faith in the future and believe that there is altogether too much knocking the other fellow."

GEORGE WESTON, LIMITED, TORONTO:—"We are very optimistic at the present time as regards business conditions for the next three or four months, and it is our firm belief that the volume of business will steadily increase till it reaches pre-war proportions."

RUSSELL BROS., FORT FRANCES, ONT.:—"Business is improving slightly since the middle of February and we have taken on a few extra hands. We have booked orders from the Provincial Paper Mills Limited, Port Arthur, and Fort William Paper Co., Limited, Fort William, for two of our 37 foot motor head-works or gasoline warping tugs for April delivery."

JOHN FORSYTH LIMITED, KITCHENER:—"Early in January we completed a new addition to our Waterloo plant, which gives us double the floor space of the original building. We have been carrying on an active campaign for more girls and have been fortunate in increasing the staff about 33 per cent. since the early par of December. We have also increased our production in the Kitchener factory about 25 per cent. since November and have worked full time during 1921 and so far in 1922."

PAGE-HERSEY TUBES, LIMITED, TORONTO:—"Our Welland works resumed operations on March 6, after a considerable period of idleness, our Buttweld mill going on double turn operation and our Lapweld mill on single turn operation, five days per week. The demand for our products shows considerable signs of improvement, particularly from foreign markets. This, no doubt, is due to stiffening in the market for iron and steel products, in the United States, former prices being decidedly unremunerative."

THE GOODYEAR TIRE & RUBBER CO OF CANADA, LIMITED, TORONTO —"We are operating our pneumatic tire plant at New Toronto to its full capacity on three shifts of eight hours each. We anticipa e that during June, manufacturers' business will fall off considerably, which will affect tire production, although it looks now that the tire industry would be in a fair condition throughout the year. Even at capacity production, we are not able to supply the increasing demand for tire products and we are now behind in our orders."

THOS. V. BELL LIMITED, MONTREAL, QUEBEC:—"We are glad to report that for the last two months we have noticed a very great improvement in business conditions. *We have been working full time with a full staff* and in addition we have had to put in quite a bit of overtime to keep up our service. We feel that a manufacturing stationery business reflects very quickly on the estimated state of business of the present and the near future, because we have always noticed, that as our customers feel that business is going to be reduced in volume, generally they curtail their orders for stationery, and as they expect improvement or larger business so they increase their orders correspondingly. The nature of our business brings us into closer contact with all classes of business, so that we are able to feel the general tone, which would not be the case if our relations were confined to one small class or commodity. The writer made prognostications during the past few years on the trend of business and affairs in this country for three years in advance, and the three years having just elapsed every single item of my predictions were fully confirmed. It may be interesting to know that this set of predictions promised that Canada at the end of 1921 or the beginning of 1922 would enter into an era of the greatest solid prosperity she had ever seen, and the state of affairs at the present time gives me a belief that my cast is a very accurate one. Anyway you can count on me as having a very strong optimism on Canadian business during the next ten years."



Opening Made-in-Canada Exhibition in Montreal

Mayor Mederic Martin receiving golden key from J. D. Chesney, General Manager, with which to open Exhibition of Made-in-Canada Goods at Almy's Limited, Montreal.

Lands Large Order for Newsprint Paper

Among the interesting export orders being received by Canadian manufacturers is one for 13,500 long tons of newsprint, which has been secured by Price Brothers & Co. Limited, Quebec from the London Daily Express. The contract covers a period of nine months, commencing April 1 and was taken at a c. i. f. price, which nets a price at the mill, satisfactory to the company.

Toronto Purchasing Agents Elect Officers

At the annual meeting of the Toronto Purchasing Agents' Association on March 11th the following officers were elected for 1922:—Hon. president, W. F. Dodd; president, R. M. Sedgewick; vice-presidents, L. B. Coombs, J. A. Fraser and F. J. Lucas; secretary, C. T. Clark; treasurer, C. W. Newton; national directors, Arthur J. Cherry and W. F. Dodd; Canadian Council, Major J. R. Bell and R. M. Sedgewick. The retiring President, Mr. Dodd, very ably expressed his appreciation of the loyalty and support given him by his officers during his term of office. Mr. McGuffie spoke on behalf of the retiring executive.

Made-in-Canada Exhibition held in Montreal

On March 4 there was officially opened in the department store of Almy's Limited, St. Catherine Street, Montreal, a Made-in-Canada Exhibition, which was scheduled to be on show for the entire month. The opening ceremony was performed by Mayor Mederic Martin, who was presented by J. D. Chesney, the general manager, with a golden key, suitably inscribed, with which the main door of the big store was opened. Following the opening the Mayor made an inspection of the Exhibition.

Speaking of the display, he commended the initiative of the management in undertaking an exhibition of this kind, expressing the hope that the example so auspiciously inaugurated would be followed by every leading store in Montreal and throughout Canada.

"This splendid display is opportune," said the Mayor, and I believe it will have its effect in bringing Canadian-made goods to the attention of the public and give them the popularity they are justly entitled to. Canada, in the field of industrial activity, while yet young, can produce an article second to none. I feel indeed privileged to assist at the opening of this Made-in-Canada Exhibition and I hope that it will help to stimulate Canadian trade and bring new prosperity to our cities and country. While the good work of our craftsmen is well known, it should be better known and utilized, and Canadian goods for Canadian consumption should be the motto of the people."

News from British Columbia Division

Headquarters of Division, 705 Board of Trade Building, Vancouver

Chairman.....J. B. Thomson, Jas. Thomson & Sons, Ltd., Vancouver
Vice-Chairman.....R. W. Mayhew, Sidney Roofing & Paper Co., Ltd., Victoria
Secretary.....H. Dalton

At a meeting of firms engaged in the manufacture of extracts, pharmaceutical preparations and vinegar held in the divisional office, Vancouver, on March 15, it was decided to form a Drug, Extract and Vinegar Manufacturers' Section of the Division. The companies forming the section are,—

National Drug & Chemical Co., Limited.
J. A. Tepoorten, Limited.
Empress Manufacturing Co., Limited.
Kelly, Douglas & Co., Limited.
W. H. Malkin Co., Limited.
Dyson Vinegar Co., Limited.
W. A. Jameson Coffee Co.

Dan Hockin of the National Drug and Chemical Co., was elected chairman and W. A. Hunter, Empress Manufacturing Co., vice-chairman. One new member will be added to the membership of the Division through the formation of this section, as an additional member will be appointed from W. H. Malkin Co.

The new section will co-operate with the similar sections already in existence in the Ontario and Quebec Divisions, and its formation will help in the prompt handling of all national questions affecting the interests of the trades represented.

New Members of Division

Among recent acquisitions to membership of the Division are Beach-Eakins Co., Limited, Victoria, a new company just incorporated for $50,000. The head of the company is H. Beach, formerly of King, Beach & Co., Mission, B. C., producers of high-grade jams, and they will manufacture jams and fruit pulp. The latter product is reported to be in large demand in Great Britain, particularly strawberry and raspberry pulp and the company expect to do considerable business in this direction. They have taken over the Hamsterley Farm interests and expect to be in operation for the first fruits of the present season.

Lumber Exports Increase

The Canadian Government Merchant Marine, and the organization of the Associated Timber Exporters of British Columbia, are largely responsible for the fact that the export lumber trade of the province increased from 146,624,269 feet B.M. in 1920 to 188,733,299 feet in 1921, according to the report of the minister of lands, just made public.

Through the Associated Exporters and several export companies, the foreign markets are now able to get a direct contact with the provincial exporters, a condition which has not in previous years been so marked as now. The fact that the C. G. M. M. ships had space and were endeavoring to develop the foreign markets of the province, also encouraged the business.

Acording to the minister's figures there has been a falling off in the big United Kingdom markets, but this weakness has been more than counteracted by demands from China, Japan, United States, and by new markets in Egypt and in the South Seas. The latter is expected to be a permanent consumer.

"The Japanese trade increased from 5,990,266 to 52,944,011 feet B.M. and the Chinese trade showed an increase of 180 per cent. over the previous year," the minister reports. "Of still greater interest is the increase in United States coastal trade. In 1920, 4,162,848 feet was supplied, whereas the record for 1921 was 25,553,543 feet. The total export was 188,000,000 feet, an increase of 42,000,000 feet for the year and a new record for British Columbia. This business now exceeds 10 per cent. of the total scale of all forest products and 20 per cent. of logs scaled west of the Cascades, after deducting for those going to pulp plants, shingle mills and for export direct.

"A still further encouraging feature of our export business is the increase shown in relation to the total export from the Douglas fir region. In 1916 we contributed only 3.1 per cent., in 1920 8.65 per cent. and during 1921 9.6 per cent. This rapid increase is in a large measure attributable to better co-operation and organization in handling the export business. The organization of the Associated Timber Exporters of British Columbia, the formulation of several export companies now gives a foreign buyer direct contact with British Columbia exporters, while the Canadian Mercantile Marine has aided in solving the shipping problem."

Favor Provincial Products

In line with the campaign in favor of British Columbia products, government liquor vendors and their assistants are being instructed to give first preference to the sale of B. C.-made whiskey. Hitherto, it is stated, many of the clerks in the government liquor stores have given out eastern or imported whiskies, when customers have asked for "a bottle of whisky," with the result that a good deal of money has gone out of the province. Premier Oliver has taken up the matter and has given instructions that, not only in the case of liquor, but in that of other classes of goods bought or sold by government departments, preference should be given to the B. C. product when price and quality are equal. The Premier has also expressed the hope that the government's example will be followed by private firms as far as possible.

Brick Plant Reopens

According to an announcement made on February 9 by J. L. Skeene, manager of the Sidney Island Brick Tile Company and the Pacific Crating Co. of Sidney Island, the two industries were to resume operations shortly. Although the brick trade is not booming now, increased building activity is expected to create a demand for all kinds of building materials, while the market for crating, it is anticipated, will show a considerable improvement soon. About 20 men will be employed in the brick plant.

The British Columbia Fishing Industry

An illuminating address on the Fishing Industry of British Columbia and its problems was delivered before the Wholesale Bureau of the Vancouver Board of Trade on March 14 by F. E. Burke, managing director of Wallace Fisheries Limited. Mr. Burke, who accompanied the delegation of B. C. business men to Ottawa in February, as spokesman for the fishing industry of the province, is a prominent member of the Canadian Manufacturers' Association, being on the Executive Committee of the B. C. Division and chairman of the Division's Legislation Committee.

"The fishing industry of British Columbia is a great deal more closely interwoven with the industrial life of this province than most of us think," said Mr. Burke. "About one person in every 26 that you meet irrespective of race, color or age, directly earns his living from fishing, and when you consider how many people, such as the employees of box factories, of plants manufacturing cans and other supplies used in this industry, are indirectly associated with the industry, you can understand its value to the industrial life of the province.

"Take the Indians in B. C., for instance. These people are public wards and the government is bound to provide them with a livelihood, if the Indians do not earn it themselves. This revenue can only be provided out of the public revenue fund, which is made up of taxes to which we necessarily all contribute. But the amount of money contributed toward the livelihood of the Indians by the government is lessened to a very large extent because of the fact that the great majority of the Indians in B. C. earn sufficient money during the salmon fishing season to very largely supply their wants during the off periods of their employment.

"Roundly speaking the capital invested in the fishing industry in this province, and by that I mean the plants and fishing boats, amounts to about $25,000,000, or approximately one-third of the public debt of B. C. Now there are a great many people who think we are carrying a very heavy public debt, and if their assumption is correct then the value of the fishing investment can be more readily appreciated.

"The province produced for the fiscal year ending March, 1921—shown in the last statement issued—no less than $22,329,000 worth of fish. This was 45 4-10 per cent. of the total amount of fish produced in the Dominion of Canada, and was $10,000,000 greater than our nearest competitor, Nova Scotia.

"Public men, financiers and newspapers are continually pointing out that this province essentially needs capital from outside for development of its natural industries. I think I am safe in saying that about 80 per cent. of the fish produced in this province is exported, or to put it concisely, for 80 per cent. of the value of all this natural product we get absolutely new money into this province and into the Dominion of Canada. Where the production is disposed of domestically, while one section of the country may profit at the expense of another section, it is a great deal like swapping money from one pocket to the other, and the country as a whole does not benefit as it does with new money brought about by the sale of the natural products of a basic industry.

"Again we have a large export business growing here and one of the principal contributions towards tonnage to the different lines is our fish business in its various forms. In that connection since canned salmon is distributed over almost every country in the world, its value as an advertising factor to the province should not be overlooked.

"One of the main points we are urging on the government is that we want stability in the regulations, that regulations be passed by act of parliament.

"We are asking that steps be taken and means adopted to put the operators in a position where they will be able to compete with the Americans who invade this territory and deplete the waters of the fish without paying any of the taxes that we do. We also ask that the Oriental operators of salteries, who compete with the canners for the same raw product, where these salteries produce a volume larger than what an individual settler would want for his own use and for sale locally, pay the same operating taxes as the canners do. Another thing we are asking for is that steps be taken to protect the halibut during their spawning seasons. It takes 12 years for these fish to reach maturity and while the catch has not decreased lately it is because of the fact that new banks are being opened up and because the boats are going further and further westward to obtain their catches."

Activities of the Month in Prairie Division

Headquarters of Division, 408 Avenue Block, Portage Avenue, Winnipeg

Chairman.....W. G. Fraser, Beaver Soap Co., Ltd.; Winnipeg.
Vice-Chairman.....J. W. Ackland, J. D. Ackland & Sons, Winnipeg.
Secretary.....G. E. Carpenter.

A POLITICAL situation which is practically without parellel in Canada, has arisen in Manitoba where the Provincial Legislature is composed of five groups, viz.: Liberal Government Group; Farmer Group; Labor Group; Conservative Group and Independent Group with numerical strength in the order named.

During the 1921 session of the Legislature a resolution was passed providing for discontinuance of the Public Utilities Commission and the transference of the work performed by the latter to the Department of the Provincial Secretary, against the wishes of the Government Party. When the 1922 session commenced its duties questions were asked the Government by opposition members as to what action had been taken on the 1921 resolution. The Government replied that, at the request of the various municipalities in the Province, the Public Utilities Commission had been continued. Then a member of the Farmer Group, Mr. Talbot, introduced a resolution embodying a vote of censure upon the Government for not carrying out the expressed wishes of the Legislature in accordance with the resolution passed during the 1921 session. Notwithstanding the fact that Premier Norris stated that the passage of such a resolution would mean the resignation of the Government, the resolution carried by a vote of 27 to 23. The Premier then adjourned the House and placed his resignation in the hands of the Lieutenant-Governor, Sir J. A. M. Aikens.

In place of calling upon any one of the opposition groups to form a government, as none of them had a majority of the whole, the Lieutenant-Governor, in a letter which Premier Norris placed before the Legislature at its next sitting, asked the Norris Government to carry on and vote necessary supplies and essential measures. This was agreed to by the leaders of the various groups although Mr. Dixon, leader of the Labor Group, took strong exception to the Lieutenant- Governor's letter, contending that "The representative of his Majesty here has exceeded his jurisdiction when he criticises the political parties of this House in that they practically are not able to carry on, and questions also whether they represent the views of the people."

In line with this agreement the various leaders of different groups held a conference and agreed that many resolutions and bills which had been introduced, or were on the order paper should not be proceeded with. Among these are: the amendment to the Winnipeg Charter, giving corporations the right to vote on money by-laws; amendment to the Workmen's Compensation Act, increasing benefits to dependents, and the provincial income tax. But, when the house resumed there was such an outcry by the country members against the dropping of the latter bill that the group leaders promised to give it further consideration. However, it is such a contentious item that it is quite likely it will not be passed this session.

Minimum Wage Bill—Alberta

The Hon. Mrs. L. Parlbey, Minister without Portfolio in the Greenfield Government in Alberta, introduced a bill providing for the formation of a minimum wage board, consisting of a representative of the employers, a representative of the workers, with an independent chairman, to establish minimum wages for female workers, after a conference with representatives of workers and employers in the various lines of industry. This follows the practice in Manitoba. When the bill was drafted, there was doubt as to whether or not all female workers were covered, or simply those engaged in factories. An amendment was secured making it plain that the bill covered all female workers except domestic servants in private houses. The bill provided that any member of the board should act as chairman of the conference between employees and employers. For obvious reasons this was not satisfactory to employers and an amendment was obtained that the chairman of the board should act as chairman of such conferences. The will also provided for a minimum fine of $50.00 for each infraction of the law for each employee. This was reduced to $25.00 for each offence covering all employees.

The bill also provided that the board's regulations would be effective when made. This was changed to read "When published in the Alberta Gazette".

The minimum wage bill also provides for the repeal of Section 26 A of the Alberta Factories Act, creating an advisory committee under the Factories Act with power to determine wages for female workers. The minimum wage act also supersedes the provisions of Section 24 of the Alberta Factories Act as to a minimum wage for any worker in respect to whom a minimum wage has been fixed by the Factories Act. In explanation of this it should be stated that Section 24 of the Factories Act provides for minimum wages for all workers of $1.50 per shift, or $9.00 per week.

Manitoba Legislation

For probably the first time in Canada, certainly for the first time in Manitoba, employers departed from their usual practice of sitting back and waiting until labor introduced all kinds of legislation in the provincial legislature, for the sole purpose of benefiting the workers at the expense of the community as a whole, and adopted the offensive, by arranging with different members for the introduction of bills in the interests of employers. Among these were:

1. A bill giving corporations the right to vote on money by-laws in the City of Winnipeg.
2. A bill to transfer the duties of the Fair Wage Board which sets prices which employers must pay for labor performed on government work, to the Joint Council of Industry. The latter after investigation makes reports upon industrial situations.
3. A bill prohibiting strikes or lockouts until after a report has been issued by the Joint Council of Undustry.
4. A bill providing for the registration of all trade organizations.

Owing to the dissension in the Manitoba Legislature, none of these measures were passed upon by the Legislature.

Labors' program embodied:

1. A bill for legalizing what was termed "peaceful picketing."
2. An eight hour day bill.
3. Plumbing bill, providing that no plumbing work should be performed except by plumbers who could pass an examination and were approved by a board set up under the act.

All three of these bills were dropped in the committee stages.

Then the Government introduced an amendment to the Workmen's Compensation Act, providing for increased benefits to the dependents of injured workmen, bringing them up to the Ontario scale, but this bill was not proceeded with owing to the dissension in the House.

Alberta Provincial Meeting

Following the usual custom, the Alberta members of the Association will hold their annual provincial meeting in Edmonton on March 24th and 25th, when matters affecting the Alberta manufacturers, will be discussed. It is expected there will be a good representation from Medicine Hat and Calgary in addition to the local members in Edmonton. and the Secretary of the Prairie Division will attend from Winnipeg. The Alberta members have planned a "get-together" luncheon with the new Farmer Government in Alberta and Premier Greenfield, and the members of his cabinet will be the guests of the Alberta manufacturers at luncheon on Saturday March 25th.

Alberta Irrigation Works

The H. G. McDonald Company, of Edmonton, were the successful bidders in the last masonry contract in connection with the Lethbridge Northern Irrigation project, this firm's tender of $218,432 being the lowest of seven. Tenders were opened at Lethbridge on Friday afternoon February 24th.

Work on the masonry work will be commenced immediately, and the contract calls for completion by December 30th, 1922. A large number of men will be employed on the project, which will doubtless help to relieve the unemployment sitution in the south country.

Manitoba Power Company

A. W. McLimont, vice-president of the Manitoba Power Company Limited, announced on March 18 that the company have awarded contracts aggregating $825,000 to Canadian manufacturers for electrical and hydraulic equipment for the new power development at Great Falls.

The Dominion Engineering Works, Limited, of Montreal were awarded the contract for supplying two 28,000 h.p. vertical water turbines.

The Canadian Westinghouse Company, were given the contracts for four switches and two Kingsbury thrust bearings.

The Canadian General Electric Company, were given the contracts for the generators and transferers.

The awarding of these contracts to Canadian manufacturers is in line with the policy which the Manitoba Power Company have consistently followed since work started on the plant. All during the winter the Great Falls development has supplied work to several hundred residents of the province and the city of Winnipeg, and rendered less acute the unemployment situation which confronted the city last fall.

The expenditure of the large amount of money involved in the awarding of the above contracts among Canadian manufacturers will extend the benefits already being derived from the building of the plant. Employment will be given to Canadian workmen who manufacture the equipment, work will be given to the railroad employees who transport the machinery from where it is made to the site at Great Falls, while installation of the machinery and equipment will call for the employment of many more men.

A large amount of money has already been spent by the Manitoba Power Company among local manufacturers, merchants and wholesale houses in the erection of the transmission line, camp site, buildings and purchase of equipment needed so far, and citizens of Winnipeg have benefited both directly and indirectly, by the distribution of these funds among local business houses.

The work at the plant is progressing favorably, and is up to schedule. Over six hundred men are now employed there.

Ontario Division's Activities for the Month

Headquarters of Division, Bank of Hamilton Building, Toronto

Chairman.....W. C. Coulter, Booth-Coulter Copper and Brass Co., Ltd., Toronto.
Vice-Chairman.....A. W. White, Geo. White & Sons Co., Ltd., London.
Secretary.....J. M. McIntosh Travelling Secretary.....O. C. Pease.

THE members of the Ontario Division must of necessity be giving close study to the hydro-electric situation. Its importance needs no emphasis. The position taken by the Government has been clearly set forth in the recent speech of the Premier at Hamilton and later in Toronto, as well as in the bill introduced in the House. The disparity between estimated and actual expenditures in connection with the Chippawa Power Development has been naturally reflected in a feeling of insecurity as to what the future may bring forth, and in consequence it becomes necessary to pause and take stock.

Members who desire to study the facts of the case rather than to accept as gospel what may emanate from those who take strongly colored views but are unable to state the reason therefor, are advised to procure the majority and minority reports of the Commission appointed to enquire into the Hydro-Electric Railways (otherwise known as the Sutherland Commission) and read them carefully, and also the statement respecting these findings issued over the signature of Sir Adam Beck by the Ontario Power Commission. The former may be procured from the King's Printer, Parliament Buildings, Toronto, and the latter from the Ontario Power Commission.

"Made-in-Canada"

Evidence that the appeal for the purchase of Canadian made products has caught the popular fancy is furnished by the fact that the merchants and business men in that new and progressive part of Toronto known as the Danforth Area, recently held a "Made-in-Canada" week. Attractive cards and posters were shown, not only in display windows but throughout almost all the stores, and these, together with special counters of assembled products of Canadian origin, combined to make the demonstration a pronounced success.

Business men throughout the province might well emulate the plan in their own localities. Every city, town and village in Canada, as a matter of fact, could carry out a similar campaign with benefit to every class of society. We are approaching the time of year in which the early fruits and vegetables from the more southern portions of the United States have an appeal that is hard to resist. Could not our people be urged, like John Maynard, to "hold out just a little bit longer" to the benefit of the Canadian farmer. A constructive campaign of this kind, for instance, would in turn, make our agricultural people see the value of buying goods of Canadian production.

Civic Minimum Wage Rates

In some of the larger cities and towns in the Province municipal councils appear to be influenced in their decisions, no doubt against their better judgment, by the representations of some classes of organized labor, as is illustrated by the tendency to establish civic minimum wage rates. Federal and Provincial governments in Canada have so far avoided becoming involved in experiments of this kind excepting in cases where boards have been set up to regulate minima for women and minors.

In other countries where the principle has been adopted for male workers boards have been set up with statutory powers, which include of course the power to set special rates for handicapped or inefficient persons.

The city council in Toronto, when the costs of commodities and wages were at the peak, established a minimum wage of 60c. per hour or $28.80 per week, without making provision for the payment of lesser rates to those who were in any way handicapped, and as the departmental officials are charged with the responsibility of efficient administration, handicapped persons who would be in a position to render valuable service are thus deprived of the opportunity of working for the city.

The members of council undoubtedly realize that this wage is entirely disproportionate to the "union or prevailing" scale, and that the time is now due for a reduction, but no one member feels that he should direct towards himself the anathema that may be heaped upon him in some quarters as the result of initiating a reduction.

His First Visit in Seven Years and Its Result

A gentleman recently walked into the Toronto Office and said with a smile "I have been a member of this Association for seven years, and this is the first time I have ever been in this office."

We regretted that we had not made his acquaintance earlier, and complimented him on the fact that, in all those seven years, he had steered the course of his company through the many difficulties which confront the average manufacturer without once encountering any obstacle of sufficient importance to warrant our assistance.

He was somewhat taken aback at this, and stated that he had encountered difficulties. One of them still existed. About an hour later he departed with information that is likely to save him quite a few thousands of dollars.

The incident makes us wonder how many more of our members are neglecting opportunities which are theirs for the grasping.

A large deputation representing the employing interests in the city of Toronto as well as representatives of industrial employes, waited on the Board of Control on the 15th of March and presented conclusive arguments in favor of adjusting civic wage rates to those that prevail.

At a time when all members of council are pledged to economy, and large numbers of needed local improvements are being postponed, it is difficult to understand why a policy which adds hundreds of thousands of dollars to the tax rate should be maintained. The civic wage rates paid in Toronto place this city at the peak as compared with wage rates paid in all other communities in the United States and Canada.

New Members Coming In

Despite the industrial doldrums in which we have been drifting for months past, it is a somewhat remarkable fact that new applications for membership are coming into the Association with fair frequency. The present is one of those periods in which manufacturers are not inclined to take on additional overhead expense, and it speaks well for the organization that the membership situation is as bright as it is.

Our members are urged, nevertheless, not to relinquish their efforts to bring in fresh support. The Divisional Secretary will welcome at all times any information which may be sent in regarding promising prospects. Members in smaller towns particularly, are urged to forward information at all times regarding new companies locating in their vicinities. We will immediately write to such companies, giving full information concerning the Association and its activities, and continue by correspondence to back the personal efforts of our members towards bringing them into the Association.

Unemployment Committee Dissolved

A meeting to wind up the work of the Advisory Committee on Unemployment was held on March 16. This committee was formed at the instance of Premier Drury to consider the question of unemployment in the province and to advise as to how best the situation should be met. It was constituted as follows,-

Hon. E. C. Drury, Prime Minister of Ontario.
Hon. W. R. Rollo, Minister of Labor (chairman).
Hon. D. Carmichael, for veterans' interests.
D. A. Cameron, Canadian Bank of Commerce for financial interests.
Chas. Marriott, for Toronto Board of Trade.
R. S. Fitzpatrick, Retail Merchants' Association.
Geo. Gander, for building and construction interests.
J. W. Doggett, for labor interests.
W. C. Good, for agricultural interests.
H. Macdonald, Canadian Manufacturers' Association

The Committee held numerous meetings and drew up a plan of co-operation which was submitted to and endorsed by the respective organizations represented. Thereafter, a plan of advertising propaganda was adopted. Major Meath, a returned officer, was appointed organizer for the Committee, who co-operated with the Ontario Division of the Employment Service of Canada.

The first of the Government's advertisements appeared on December 8th, 1921, the total number of advertisements being 489 and the number of newspapers advertised in, 53.

The number of meetings held relative to the campaign was 175, at which 262 speakers took part, including the Premier, cabinet ministers and representative business men. 62,500 copies of literature on the subject were distributed, while the newspaper editorials and comments, especially arranged for, numbered 165.

The number of representative business men, commercial, industrial, executive, etc. interviewed in person by the officers of the committee was over 700.

The representative of each organization furnished the Premier, at his request, with the form of a circular for distribution amongst the appropriate sections, which were issued above the signature of Premier Drury.

The reports of the representatives on the Committee were to the effect that, while it was difficult to state in precise terms tangible results, it was nevertheless the general view that the work of the Committee had resulted in the formulating of a healthy, optimistic sentiment amongst the community generally, and especially throughout the commercial community. Mr. Ballantyne reported that by far the largest numbers of letters received by his Department were from manufacturers, and that the trend of these letters without any exception, supported the view originally expressed on behalf of the manufacturers that they had anticipated the campaign of the Committee by reducing prices of commodities, and also that the letters showed very general appreciation of the desire of the Government to help business.

As the temporary purpose of the Committee appeared to have been discharged, it was agreed, failing any matter of emergency arising, that the Committee should be dissolved.

This Month's Activities in Quebec Division

Headquarters of Division—113 Board of Trade Building, Montreal

Chairman.....J. H. Fortier, P. T. Legare, Ltd., Quebec.
Vice-Chairman....F. W. Stewart, Cluett, Peabody & Co., of Canada, Ltd., Montreal.
Secretary.....R W. Gould. Assistant Secretary.....A. S. Findlay.

AT a meeting of the Executive Committee of the Montreal Branch held in March it was decided that the annual meeting of the Branch be called for Thursday May 11th, next. Last year the annual meeting was held on May 12th., jointly with the annual meeting of the Division. A meeting of the Executive of the Quebec Division will be held on March 29th., in the City of Quebec and in all probability it will then be decided to continue the practice instituted last year, viz. the holding the annual meetings of both the Quebec Division and Montreal Branch at the same time.

The annual banquet will follow the annual meeting in the Rose Room of the Windsor Hotel. Arrangements as to speakers and other details have been left in the hands of the Membership and Reception Committee for decision. Every effort will be made to make this annual meeting and banquet the most successful that has yet been held in the history of the Division and Branch.

An Address on China

On March 21, Dr. Chilien Tsur, Chinese Consul-General for Canada, Ottawa, was guest of the Montreal Branch at luncheon at the Windsor Hotel. J. B. Coghlin, chairman of the Branch, presided and there was a large attendance of members.

The Chinese Consul-General said he brought to Canada hearty greetings from the Chinese Republic, with the hope that friendly hands would be stretched across the Pacific to increase the amicable and commercial relations between Canada and China. It would be hard, he said, to improve trade relations until there were better direct steamship connections between the two countries, which he hoped soon to see.

Dr. Tsur told the Manufacturers that there were great opportunities for trade with China, a country of ancient civilization and modern progress, where jade temples and porcelain pagodas rubbed shoulders with factories and iron mills and other evidences of modern progress. China had not merely an immense population, but a vast and increasing purchasing power as its modern progress developed, while its vast extent and changes in climate from tropical to arctic, from the Pacific to Thibet not only meant an immense difference in needs, but an equal diversity of exports.

All this great market lay practically at the door of Canada across the Pacific, said Dr. Tsur, and the more China developed along modern lines the greater that market would become. At present there was an absolute shortage of labor in China, with strikes and similar troubles to those experienced here, so he thought there was little danger of any rush of Chinese settlers to Canada.

Invitation to Visit China

"My Government," said Dr. Tsur, "has instructed me to invite Canadian manufacturers and business men to visit China, with assurance that they will receive a warm welcome and every courtesy there. We want your business men to visit our country, not only to see the awakening of business along modern lines, but to see the cities of our four thousand year old civilization, side by side with the evidences of our progress of today. China today is awake to the necessity of taking its place among the comity of world nations, with modern educational and industrial methods. We have enormous resources, both in coal, iron and other minerals, as yet undeveloped. Today we are exporting large quantities of coal, and, if we had better shipping facilities, by rail and steamship, it would not be long before we could ship large quantities of coal to Canada, which can be produced and delivered at comparatively low prices. I look to the time when Chinese coal will take an important place in the Canadian market."

The Chinese steel and iron industry was also growing rapidly, together with a young shipbuilding industry, and many other lines of work. All these, said Dr. Tsur, opened the way for much import of materials and machinery, and he hoped to see the Canadian manufacturers getting into this market. Canada, he thought, could easily work up a good export trade to China in building material, metal products, electrical supplies, rubber goods, locomotives and railway cars, motor cars and lorries, paper products and machinery, while there was ample export goods in China to supply return cargoes.

Export Club's Executive Meets

An executive meeting of the Export Club of Montreal and District was held in the Old Colony Club, Windsor Hotel on Friday, March 10th, with the Vice-President, J. A. Lapres in the chair.

Fred H. Gibbs, traffic manager and assistant to the president of the Atlantic Sugar Refineries, was unanimously elected a member of the executive to fill the vacancy due to the resignation of Mr. Trotter.

Amongst the subjects brought up for discussion were: Direct parcel post service between Canada and Mexico, and especially the establishing of Montreal as an assembling point for direct shipment.

Daylight Saving: The Executive were unanimous in endorsing this movement, and placed themselves on record as being in favor of it being made permanent in the City of Montreal and in the Province of Quebec.

A letter was read from a local importing and exporting firm, members of the Club, offering to place at the disposal of the Club, the services of its offices in South and Central American countries, also the United Kingdom, France, Germany, Sweden and West Africa, should any member of the Club desire to have these markets investigated for his own particular line.

The letter explained the services which the company were prepared to render and among other matters stated that they would undertake, upon request, to furnish free of charge a detailed report covering the saleability of any Canadian product, supplying particulars re nature of competition, suitable grades and quality, packing, volume and the necessary f.o.b. Canadian prices to meet the foreign competition. They were also prepared to recommend the best way for the Canadian manufacturer or supplier to proceed in order to take advantage of the foreign situation outlined in our report covering the particular product.

With respect to putting firms in touch with export that hitherto had not been interested in this activity, the Secretary was ordered to write each Canadian Trade Commissioner and ask him for a list of the articles which might well be exported from Canada to that country which was under his jurisdiction. On securing this information, the Secretary was instructed to compile it into a comprehensive circular which should be mailed to all members within the jurisdiction of the Club.

Expansion of the Commercial Intelligence Branch of the Department of Trade and Commerce: It was the feeling of the executive that expenses in this Department should not be curtailed, but that more money should be spent and the activities of the branch widened.

The question of bringing home a group of trade commissioners from various countries at one time and organizing what could be known as "Trade Week" at Ottawa, was discussed, and the opinion of the meeting was that this would work out to better advantage than the present system of commissioners returning singly and at odd times.

Vice-Chairman Speaks at Dinner

At a dinner meeting of the Retail Shoe Dealers' Section, Retail Merchants' Association of Canada, held at the Place Viger Hotel, Montreal, on March 9, the principal speaker was F. W. Stewart, Cluett Peabody & Co. of Canada, Limited, vice-chairman of Quebec Division. Mr Stewart took as his theme, "Salesmanship under Existing Conditions."

"A real salesman," said Mr. Stewart, "must be blessed with diplomatic ability under existing conditions; he must create an atmosphere of confidence in the customer of the store; he must be full of courage to cope with the conditions as they are; he must have faith in himself and in the merchandise he is selling, and confidence in his ability to sell twice the number of units as compared with the previous year."

In reviewing the conditions which the retail merchants are facing today, Mr. Stewart summed them up as follows: decreased sales, high overhead expenses, lack of stability in values, uncertainty of prices, the attitude of people towards the retail merchants and manufacturers. The most logical remedies, he suggested, are decreased expenses, better buying, greater efficiency, bigger sales, buying only what is absolutely necessary, the elimination of any styles that are not absolutely essential from the stocks, and seeing to it that the values are the best to be had.

Rents, wages and advertising, continued Mr. Stewart, are not likely to decrease, nor are wages. The only cut which might be made would be the merchant decreasing his own drawings. There remains therefore, mainly to train the clerks to more efficiency and enthusiasm, to politeness towards customers, and to make them realize the possibilities of increased sales by powers of suggestion.

Round Table Talk By Exporters

One of the most successful and interesting general meetings of the Export Club of Montreal and District yet held took place in the Old Colony Club, Windsor Hotel, Friday March 16th., with Kenneth Dawes in the chair.

This meeting, which was largely attended, took the form of a round table talk, dealing with matters relative to export trade. This method proved highly successful. Members came out with problems which they were up against in exporting to a certain country and they were discussed by the meeting.

One of the members recently returned from the West Indies, gave a short resumé of his trip, pointing out the necessity of Canadian firms changing their trade packing units to the size of the unit generally used in that country. He said that he had found it possible to successfully compete with the United States manufacturers, but so far as the English manufacturer was concerned, the margin was very narrow; sentiment however, was very favorable to dealing with Canada.

LA SECTION FRANÇAISE

L'Expansion Industrielle

DEPUIS plusieurs années et surtout après l'armistice, qui à mise fin au grand conflit mondial, l'Association des Manufacturiers Canadiens, s'est évertuée à travailler à la reconstruction économique de notre pays, qui s'est trouvé bouleversé et dans un désarroi presque complet.

Toutes les branches des différentes provinces sous l'impulsion de l'exécutif général, ont réalisé certaines réformes qui ont contribué à relever nos industries qui se trouvaient dans le marasme, et nous sommes heureux de constater que la branche de la province de Québec a grandement contribué à amener nos industries dans le chemin, du progrès qui s'accentue tous les jours.

En vue de stimuler d'avantage, s'il est possible, ce mouvement de reconstruction, l'Association a cru bon de reconnaître l'excellent travail de coopération que la branche de Québec fait depuis quelques années, en consacrant dans l'Industrial Canada quelques colonnes dans la langue française, afin de permettre, à nos concitoyens de cette province progressive, de suivre la marche du mouvement industriel dans notre pays, et aussi d'émettre leurs opinions et suggestions qui seraient de nature à activer la marche ascendante de nos industries Canadiennnes.

Des représentations ont été faites auprès du gouvernement fédéral, afin de modifier certaines clauses de l'impôt des ventes entre industriels, marchands de gros et détaillants, qui, pour le moment ne peuvent pas être agréés, mais en revenant à la charge, par l'entremise des différentes branches de notre Association, on pourrait obtenir, sinon toutes les réformes que nous désirons, au moins une bonne partie d'entre elles. Par conséquent, nous demandons à nos confrères de la branche de Québec de bien vouloir profiter de l'innovation de la partie française du Industrial Canada, pour nous soumettre leurs opinions et même leurs critiques sur tous sujets qui seraient de nature à promouvoir les intérêts industriels de notre pays.

Parmi les réformes que l'Association à mises en marche, est le club d'Exportation qui déjà prend de l'expansion et contribuera grandement à augmenter la demande de nos produits à l'étranger. Ce mouvement qui s'accentue de jour en jour, aidera grandement à équilibrer l'état de l'échange qui laisse encore à désirer, et nous espérons qu'avant longtemps cette perturbation de nos valeurs monétaires reprendront leur cour normal d'avant la guerre.

Il y a une foule d'autres questions qui méritent la considération de tous ceux qui s'intéressent au relèvement de nos industries et nous comptons sur la coopération de tous les membres de l'Association, afin qu'ils enrôlent de nouveaux adhérents, et par le fait étendre nos opérations dans tout le pays et nous mettre en position de soutenir la concurrence qui nous est faite par les pays étrangers.

Nous réitérons notre demande à nos collègues de langue française, de collaborer à cette section française du Industrial Canada, en nous faisant parvenir leurs vues sur toutes questions qui intéressent l'industrie canadienne et de tout ce qui en découle.

Toutes communications devront être adressées à M. R. W. Gould, secrétaire de l'Association des Manufacturiers Canadiens, branche de Québec, chambre 113, Edifice du Board of Trade, Montréal ou M. W. A. Craich, rédacteur du Industrial Canada 1404 Edifice de la Banque de Hamilton, Toronto.

La question ouvrière dans la province de Québec

Le Col. Smart, député de Westmount, déclancha dernièrement une discussion sur la grève des typographes de Québec, qui aura, nous l'espérons, des conséquences heureuses et détermineront pour l'avenir la situation ouvrière non seulement dans la province de Québec mais dans tout le Canada. La motion du député de Westmount n'était pas antipathique aux unions ouvrières mais comportait qu'il était temps de faire cesser l'oligarchie imposée par les unions internationales, dont les assises principales sont aux Etats-Unis.

Le but du Col. Smart était une espèce d'affirmation aux déclarations de l'hon. premier ministre Taschereau, qui protesta énergiquement contre la grève des typographes qui a mise en quelque sorte un échec sérieux aux travaux parlementaires, et le gouvernement, tout en approuvant en principe la motion Smart, voulut en enlever les aspérités, en supportant de préférence l'amendement de M. J. Edmond Robert, député de Rouville, qui affirme le fait que les unions ouvrières doivent être avant tout Canadiennes, régies par des organisations canadiennes sans l'ingérence d'influences étrangères.

Cet incident qui établira, pour l'avenir, le status des unions ouvrières dans la province de Québec, influera considérablement sur notre situation économique, car il était temps de faire cesser un état de choses qui, non seulement, compromettait l'avenir industrielle de la province, mais créait un malaise général parmi la classe ouvrière.

L'attitude de l'hon. premier ministre Taschereau sur cette question, recevra, sans doute, l'approbation de la plus grande partie de notre population, et aura une certaine répercussion dans les autres provinces, car, pour tous ceux qui préconisent l'autonomie sous toutes ses formes, verront d'un bon œil le geste ferme du gouvernement de la province de Québec, qui, la première, a affirmé sa détermination que toutes organisations, desquelles dépendent les intérêts généraux, doivent être exclusivement canadiennes, contrôlées par des lois canadiennes, pour le plus grand bien des canadiens qui en font partie.

On a insinué, en certains quartiers, que l'action du gouvernement sur cette question avait été suscité par des influences industrielles, mais les déclarations catégoriques de l'hon. M. Taschereau sur ce sujet, réduisent à néant ces avances intempestifs, et de fait, mettent au point la situation telle qu'elle est et qui n'a rien d'anormale.

Le commerce avec la Chine

Mercredi soir, le 22 mars, la division de Montréal de l'Association des Manufacturiers Canadiens conviait ses membres à un diner-causerie dans la salle Oak de l'hôtel Windsor, ayant comme hôte d'honneur l'hon. Chilien Tsur, Ph. D. ex-membre du conseil exécutif du gouvernement Chinois, ancien consul de son pays à New-York, et maintenant Consul général du Canada, ayant joué un rôle important à la conférence de Washington.

M. B. J. Coghlin, le président de la division locale présidait cette réunion, à laquelle assistait un grand nombre d'industriels et autres hommes d'affaires de la métropole et d'ailleurs. Après quelques remarques appropriées du président, l'hon. M. Tsur, qui est un gradué de l'Université d'Oxford, dans un langage châtié et d'un anglais parfait, sût intéresser au plus haut point ses auditeurs, sur les opportunités du commerce que le Canada pourrait avoir avec son pays, dont le modernisme s'accentu tous les jours, et qui pourrait disposer d'une foule de nos produits et établir un commerce d'échange qui serait très avantageux pour les deux pays. Au moyen d'une ligne directe avec la Chine cet échange de commerce prendrait une expansion extraordinaire en peu d'années.

L'exposé attrayant et pratique de l'hon. M. Tsur, souleva de frequents applaudissements et une fois de plus l'esprit d'initiative de la division locale des Manufacturiers Canadiens a ouvert de nouveaux horizons commerciaux qui devra intéresser le gouvernement Canadien a prendre en sérieuse considération.

M. le président Coghlin, en termes choisis, remercia le distingué conférencier et lui assura que ses suggestions seront mises en pratique par l'Association et qu'elle profitera des opportunités qu'il a si éloquemment signalées.

Assemblée Annuelle des Divisions de Montréal et Québec.

L'année fiscale de l'association des Manufacturiers Canadiens expirant avec le mois de mai, les divisions de Montréal et de Québec se réuniront le 11 mai, afin de recevoir les rapports généraux des affaires transigées par ces divisions durant l'année qui vient de s'écouler.

Si on fait un résumé du travail accompli durant les derniers douze mois, on pourrait mentionner la demande de l'exécutif au gouvernement fédéral de modifier la loi des impôts sur les ventes afin de les répartir d'une manière plus équitable sur chacun des interessés. On présenta aussi une requête pour la diminution des taux de fret, afin de faciliter l'exportation des produits manufacturés. On signalera aussi une augmentation sensible dans le nombre des nouveaux membres dans les deux divisions, malgré la dépression des affaires qui a sévit durant l'année fiscale. On a pu aussi obtenir de la législation assez avantageuse de la part du gouvernement de la province de Québec.

L'innovation de l'établissement du Club d'Exportation a créé une émulation superbe parmi nos industriels, et la part active prise dans les affaires municipales a eu pour effet de réveiller l'attention du public, ce qui constitue les principaux travaux accomplis durant la période fiscale qui vient de s'écouler.

Comme on a aussi procédé à la réorganisation des exécutifs de nos deux divisions. Mr. B. J. Coghlin, le président actuel de la division de Montréal se retirant, a été remplacé par le vice-président Mr. F. G. Daniels de la Dominion Textile Co. Pour la division de Québec M. J. H. Fortier, président sortant de charge, a eu comme successeur M. F. W. Stewart, qui occupait la charge de Vice-président.

Vu l'activité qui s'est manifestée dans les divisions de Montréal et de Québec et le surcroît de travail qui en découle, on a été obligé d'augmenter le personnel du bureau à Montréal et les accomodations en conséquence.

Réduction de Taxes

Parmi les mesures législatives décrétées par le gouvernement de la Province de Québec, nous sommes heureux de signaler celle réduisant la taxe sur les succursales des compagnies commerciales qui, tout en restant à un dixième de un pour cent sur le capital investi, l'impôt additionnel de $50. est réduit à $30. pour les succursales de Montréal et Québec et à $15. dans les autres localités. En sus, si le capital investi est moins de $25,000, la taxe est réduite à $15. et $7.50 respectivement.

Nous applaudissons à cette mesure progressive, car cela aura pour effet d'encourager les petites compagnies. Les compagnies de navigation ou de chemins de fer qui établissent des hôtelleries jouiront du même privilège.

Il est pourvu dans la loi que le lieutenant-gouverneur en Conseil pourra accorder telle réduction aux compagnies dont les bureaux-chef sont situés en dehors de la province et qui font affaire dans notre province, ou dont le bureau-chef est dans la province et que la plus grande partie du capital investi est utilisé en dehors de la province, mais qui ne font que d'en détenir les obligations, débentures ou autres garanties de compagnies incorporées et ayant leurs bureaux-chef dans la province y faisant affaire. Il est de plus pourvu, que le lieutenant-gouverneur en Conseil pourra fixer la réduction des taxes accordée aux compagnies de navigation qui voyagent entre les ports de la province ou en dehors.

La clause pourvoit au paiement des taxes le 1er juillet de chaque année avec les mots, "avec intérêt légal à cette date", il est de plus pourvu qu'une partie des taxes seront payées, si la compagnie a été formée durant l'année fiscale suivant la proportion pour la période d'opération. Par un amendement, il est pourvu qu'au cas qu'une compagnie serait mise en liquidation ou abandonnerait sa charte, elle sera remboursée de la taxe pour la portion de l'année durant laquelle son actif sera réalisé par le liquidateur.

La loi de faillite

Parmi les questions importantes qui ont été soumises à l'assemblée de la division de Québec, tenue à Trois-Rivières le 27 février dernier, la nouvelle loi de faillite a fait le sujet d'une intéressante conférence donnée par M. Louis Létourneau, M.P.P., de Québec.

M. Létourneau fit une analyse succinte de la nouvelle loi, signalant tous les points qui prêtent à des abus au détriment du commerce en général. Ces points peuvent être classés comme suit:

La nouvelle loi permet à aucune personne qu'il soit commerçant, fermier, homme de profession, etc., de demander sa mise en liquidation du moment qu'il est endetté de $500. tandis que l'ancienne loi exigeait que celui qui voulait être mis en faillite soit un commerçant quelconque.—Il cita ensuite le fait que la loi actuelle permettait à un failli de régler à 15 cts, dans la piastre, du moment qu'il obtenait la signature de 51% des créanciers représentant les deux tiers de son passif. Sur ce point M. Létourneau déclara que, par le fait les syndics autorisés parcouraient le pays afin d'induire ceux qui sont endettés du montant précité, de se mettre en faillite, quand souvent ils seraient en mesure de rencontrer leurs obligations.

Sur la question des frais encourus par la nouvelle loi, M. Létourneau signala le fait qu'ils sont trop élevés et que la pétition soit servie au marchand dans les dix jours et que l'ancienne loi spécifiait quarante huit heures. A l'heure qu'il est les frais d'un liquidateur d'une faillite de $5,000. s'élevent jusqu' à $800., et comme la commission du Syndic n'est que de 5%, il a le droit de charger $1. pour chaque appel par téléphone, $1. pour chaque lettre et $1. pour chaque avis, ce qui augmente les frais à 10% avant que la faillite soit réglée.

Entre autre chose M. Létourneau démontre aussi que souvent les créanciers ne s'accordent pas sur le choix d'un liquidateur et qu'après qu'on en a choisi un, on le supplante pour un autre, et alors les frais encourus par le premier Syndic doivent être payés et ceux de son remplaçant sont ajoutés, de sorte qu'il ne reste presque rien pour les créanciers.

Dans les cas de petite faillite M. Létourneau suggère que l'honoraire légal du syndic ne devrait pas être de plus de $25., tandis qu'actuellement il est invariablement de $43., et que la commission de 5% couvre tous les autres frais.

Un autre point important que M. Létourneau a soulevé est que tout marchand devrait tenir une comptabilité suivie et régulière, devant produire une inventaire des deux années précédentes de sa demande en liquidation, et que le système de livres à feuillets détachés prête à des fraudes car un marchand pourrait enlever un de ces feuillets contenant des crédits sûrs qu'il collecterait lui-même après que sa faillite sera réglée.

M. Létourneau traite aussi des pénalités pour fraudes qui sont à l'heure qu'il est trop tolérantes et soumet une période d'emprisonnement plus longue. De plus, d'après la loi actuelle une personne peut demander d'être mise en faillite dans aucune localité de la province où il y a le moins de ses créanciers possible. M. Létourneau suggère que les quatres localités ou la mise en faillite peuvent être faite, soient: Montréal, Québec, Trois-Rivières et Sherbrooke.

Bref, les arguments de M. Létourneau sur cette importante question ont été fort appréciés par les membres de la division de Québec qui assistaient à cette réunion, au point que le secrétaire a été autorisé d'en enregistrer les principaux points et de faire parvenir des copies de cette conférence à tous les membres de la division.

Assemblée du Club d'Exportation

Une assemblée très intéressante du Club d'Exportation, de Montréal et du district a eu lieu vendredi soir le 3 mars, au Club Old Colony de l'Hotel Windsor, et à laquelle il y avait un bon auditoire. Mr. F. R. Whittall, le président, occupait le fauteuil.

M. Douglas S. Cole, le sous Commissaire des renseignements Commerciaux du département à Ottawa, a donné une conférence sur les moyens pratiques d'empaqueter les marchandises pour l'exportation, avec illustration au moyen de films fournis par le gouvernement. Les films produisaient des photographies de l'expédition actuelle, démontrant la manière convenable et impropre de faire l'empaquetage. Ce moyen instructif démontrait la manière que les boites, colis etc., étant expédiés de ce pays, doivent être préparés assez fortement et d'une manière scientifique afin qu'ils résistent aux dures secousses durant le transport.

Un film produit de plusieurs fabriques de Montréal à été montré sur l'écran, expliquant comment on doit manipuler le traffic d'exportation. Comment une commande du Sud Africain, reçu par Brown et Cie, pour des marchandises en conserves, de qualité inférieure qui ont été mal empaquetées et mal facturées. Une commande semblable reçue par Raleigh et Cie, de marchandises de bonne qualité avec des boites proprement étiquettées et convenablement empaquetées et bien facturées à destination, de sorte que Raleigh & Cie reçurent de nouvelles commandes à l'encontre de Brown et Cie.

Deux films additionnels ont été produits démontrant le développement des forces motrices à Shawinigan Falls et autres endroits sur la côte nord du St. Laurent.

Un fait à noter est que ces films et la machine à projection lumineuse qui les produits ont été fabriqués en Canada.

L'industrie Allemande

Un des membres de notre division de retour ces jours derniers d'un voyage en Allemagne, nous a fait part de ses impressions sur la situation industrielle dans ce pays et des observations qu'il a faites durant le temps qu'il y a séjourné.

L'activité industrielle bat son plein dit-il, et vu qu'il n'y a aucune restriction sur les heures de travail, le fabricant allemand, dans plusieurs lignes tient entre ses mains le contrôle du commerce dans le monde entier, et on doit s'attendre, comme on l'a déjà constaté, que notre marché sera inondé de produits divers, tels que les jouets, les bijouteries communes, les produits chimiques, les tissus artificiels et la camelotte en général. Cet état de chose est causée pas la dépréciation du mark, mais il a constaté que le prix des marchandises régulières, est au même niveau que sur notre marché, si on peut mentionner les vêtements, chaussures et autres effets de bonne qualité, car un bon habillement se vend 10,000 marks, équivalant à $50.00, et il en est de même pour les tissus de bonne qualité; mais du moment que la monnaie allemande aura repris sa valeur normale, la concurrence de ce pays ne sera pas à craindre, car le coût de production augmentera de même.

Ce qui est un obstacle pour l'expansion industrielle, en ce qui concerne l'exportation de leurs produits, est l'impôt de 50% que le gouvernement exige sur la production générale. Par conséquent, en ayant des lignes directes avec les principaux ports allemands nos industriels pourraient trouver un marché quelque peu avantageux avec ce pays.

Notre confrère a profité de son voyage pour acquérir certains procédés pour sa fabrique, qui lui permettront d'améliorer ses produits et de faire face à toutes les commandes qu'il pourrait recevoir d'aucune partie de notre pays, et nous applaudissons de grand cœur à son esprit d'initiative et nous lui souhaitons tout le succès possible.

News of the Month from Maritime Division

Headquarters of Division—Amherst, Nova Scotia

Chairman.....L. W. Simms, T. S. Simms & Co., Ltd., St. John, N.B.
Vice-Chairmen.....C. S. Sutherland, Amherst Boot and Shoe Co., Ltd., Amherst.
J. A. Marven, J. A. Marven, Limited, Moncton, N.B.
J. E. McLurg, Halifax Shipyards, Limited, Halifax, N.S.
Secretary.....H. R. Thompson, Box 470, Amherst, N.S.

THE three local legislatures are now in session but so far no legislation has been introduced which directly affects manufacturers. So far as we can ascertain it is not the intention of the governments to introduce any labor legislation at the present session.

A meeting of the New Brunswick Federation of Labor was recently held and a program of proposed legislation was drawn up. This has since been submitted to the New Brunswick Government, but so far we have been unable to obtain a copy. We understand that resolutions were adopted in accordance with the following:

That no private person or corporation be allowed to distribute Hydro-Electric for profit.

Condemning the "open shop" principle and otherwise dealing with unemployment.

Conference between Dominion and Local Governments and other bodies re unemployment.

Condemning the ten hour day and twenty percent reduction of wages in Moncton Railway Engine Shed.

Urging conference between Local and Dominion Governments on labor matters dealt with by Versailles Peace Conference.

That Workmen's Compensation Act be brought into agreement with that of Ohio.

A resolution was also adopted calling for a joint Convention of the United Farmers of New Brunswick and organized labor, to arrange if possible for a working agreement as to political action and to clear up as far as possible all misunderstanding.

Recommendations were also made that the Government be asked to provide for Mother's Allowance and Minimum Wage for Women and Children.

Labor Conditions in Coal Mining Industry

The award made by the Board of Conciliation which was appointed at the express request of the miners, was not satisfactory to them and the leaders therefore called a district convention to decide on further action. Instead of recommending immediate drastic steps, the convention decided that negotiations should be resumed with the operators. Conferences were held in Montreal, with the result that the operators agreed to somewhat better terms than those recommended in the award. They did so with the understanding that the executive of the U. M. W. would recommend the acceptance of same to the miners. However, after returning to the District, some of the members of the executive declared their opposition to the new terms, the chief opposer being the District Secretary of the U. M. W., who has since issued a secret manifesto to the 1,2000 miners in District No. 6. The wording of this document is somewhat different than what was originally given to the press. In it he recommended action as follows,—

"First, the men, where they have not already done so, must cut down production, and deliberately set themselves to greatly increase the cost of production in the coal cars at the mine.

"Second, is an appeal to the Progressive Party in Ottawa.

"By a steady and constant pressure on the profits of the company, you can make them feel it is a dangerous thing for them to try to enforce a starvation wage.

"Let the men fight on the job and the officers fight in every public place and we are bound to win."

This manifesto was brought to the attention of the Minister of Labor who immediately sent a long telegraphic message to J. B. McLachlan, Secretary, asking if he had been reported correctly and pointing out that the action which he advocated to the miners would, in the long run, prove to be to their detriment. In answer to the Minister's message, Mr. McLachlan wired the following-

"Replying to your lengthy telegram of Saturday, wish to state that in manifesto issued by me on 16th inst., neither the thing known as "sabotage", nor the word itself, were mentioned. Once, however, I did in that document strongly advise the miners to cut down production to a point where all profits for the British Empire Steel Corporation would vanish. This tactic, as a method of retaliation for a highly unjust encroachment of the employers on the wages of their workmen, and an invasion on an already all too slender living, I have proclaimed openly and in the face of day, and there is nothing dishonest about it; you to the contrary, notwithstanding. I have preached this with the blessing of my friends and amid the curses of my enemies. I have preached it to individuals, to tens, to hundreds and to thousands. I have done it on land and on sea, in miners' halls and in churches, on the hillsides of Nova Scotia and on her busy streets; and, Mister Minister, what are you going to do about it? I shall do it again this week, knowing that a miner has a perfect right to work with his coat on if he wants to. But what kind of innocent or hypocrite are you? Did you not one year ago call a strike of the Trainmen employed at the Sydney Steel works, owned by the British Empire Steel Corporation, and did you not circularize the trainmen on the Sydney end of the Government Railway to institute a blockade on all Steel Company products and tell the trainmen to leave the cars with Steel Company goods in the sidings in the woods where there were no telegraph offices? And you made no exception to perishable goods. That was "Sabotage" from top to bottom, from start to finish.

"Our method of fighting this unjust wage imposition is effective and within the law, and the prime reason why the stock gamblers at Montreal got you to wire a lecture to me is this: Listen, Caledonia mine, for the week ending December sixteen, hoisted eight thousand, five hundred and sixty-one tons of coal, at a labor cost of two dollars and two cents per ton. That was before the cut in wages was made. Since the first of the year wages have been cut thirty-two per cent. For the week ending January thirteen, the labor cost per ton was one dollar and sixty-two cents. And then the miners refused to strip themselves naked to the waist to give the best that is in them, as you put it. Instead they cut down production, and for the week ending January twenty-seven, produced two thousand three hundred and twenty-two tons, at a labor cost of two dollars and twenty-five cents per ton. Add on the other overhead charges on that miserable two thousand tons of coal, and you may be able to guess why the hallelujah chorus is ringing in the soul of the miners who are actively fighting an unjust wage, and why the stock exchange gamblers at Montreal are reduced to seek the assistance of an innocent like you.

"There is no wage agreement of any kind here. The British Empire Steel Corporation is seeking to impose a rate as low as two dollars and eighty-five cents per day, and refuses to give men with that small wage anything like six days per week. They are imposing these miserable wages to enable them to pay dividends on huge blocks of watered stock and on acres of idle junk that they call steel works.

"We shall continue to fight the imposition of this iniquitous wage reduction, if we have to rock the ramshackle institution known as the British Empire Steel Corporation from its rotten sills to its bending and shaking rafters."

Power Situation at St. John

A joint report of the Civics and Industries Committees on the hydro-electric situation, was discussed and approved by the St. John Board of Trade at its meeting on March 9. A provincial Hydro-Electric Power Commission has been building a power plant for the supply of power to St. John and the point has been reached when some arrangement becomes necessary with the New Brunswick Power Co., which at present supplies electric light and power, gas and a street railway service to the city.

The report considers it desirable that a direct contract should be made between the city and the government, represented by the Power Commission, to deliver to the city a stated constant amount of power at a maximum rate per k. w. h. It believes that every reasonable effort should be made to continue the use of existing equipment (the Power Company's system) in rendering service to the community and therefore holds that the city, having acquired the power from the Commission, should offer a contract for its distribution to the Power Company on the following conditions,—current to be furnished at cost and resale price to be definitely fixed by the contract. Should the Power Company refuse to accept contract, the city should take the necessary steps either to expropriate the required part of the Power Company's plant and equipment or to proceed to install the plant necessary for the distribution of the power. Should the city be compelled to distribute the power, the report recommends appointment of an independent commission.

The chairman of the Industries Committee is L. W. Simms, this year's chairman of the Maritime Division, C. M. A.

Nickel Company Concentrating Work in Canada

As some confusion appears to have arisen with regard to the future program of the International Nickel Companies, INDUSTRIAL CANADA has secured the following statement from J. L. Agnew, president of the International Nickel Co. of Canada Limited,—

"It has been decided to concentrate all refining operations at our Port Colborne plant, and steps are now being taken to dismantle the refinery at Bayonne, N. J. and install such units as we have not had at Port Colborne, in the Canadian refinery.

"The only operation in the United States will be a rolling mill, which has been built in Huntingdon, W. Va., for the purpose of rolling monel metal products, such as sheets, rods, etc. An adequate supply of low sulphur fuel, i.e. natural gas, and the proximity to the centre of distribution of above products, made this location desirable. Aside from this mill, which is relatively a small part of the Company's activities, all work in the future will be concentrated in the Province of Ontario."

News Relating to Export Trade

Published by arrangement with Canadian National Export Club

Trip to Australia and New Zealand

One of our members is considering a business trip to Australia and New Zealand in the near future and would like very much to hear of any other Canadian Manufacturers who have a similar trip in mind. If you are interested please advise the Commercial Intelligence Department, Canadian Manufacturers Association.

Construction of Port Works in Chile

We have information that the law authorizing the construction of port works and railway works in Chile has just been passed. Approximately 7 million pound sterling will be expended on the following: The completion of harbour works at the port of Valparaiso; the supplementary works at the port of Antofagasta; improvements in the ports of Constitucion, Iquique, Talcahuano, Lebu, Puerto, Saavedra and Valdivia; the construction of a breakwater and a pier at Puerto Montt; and the construction of a pier and supplementary works in Tome and Richilemu.

Approaching International Trade Fairs

Trade fairs of more than local importance to be held in Europe within the next few months include a merchandise fair at Zagreb Jugoslavia, some time during the Spring; a Frankfurt fair from April 2 to 8; a Brussels fair April 3 to 19; a Milan fair from April 12 to 27; a Basle fair from April 23 to May 2; a special fur fair at Leipzig, April 23 to May 13; the First International Book Fair at Florence, during April, and fairs at Trieste and Paris during May. Another fair of especial interest is the Third Netherlands Indies Annual Fair which will be held at Bandoeng, Java from September 18th to October 8th, 1922.

Peru Sells Stored Goods After 6 Months

The Peruvian Government has begun to put into practice the recent decree authorizing the sale at auction of merchandise which has been allowed to remain in custom stores more than 6 months. In addition to the amount due for duty and storage charges, a surcharge of 1% of the duties will be added for each of the first two months of storage or fraction thereof beginning with May 1, 1921, 2% for each of the third and fourth months or fractions thereof, and 5% for each of the fifth and sixth months or fractions thereof.

Exporters with refused goods in storage in Peru, and likely to be affected by the operation of the above decree, are advised to make prompt decision as to whether they wish to leave their goods to auction or to move them elsewhere.

Mexico Second Trade Exposition

The Second Annual International Commercial Exposition in Mexico City will open on June 4th, 1922. This will be held at the legislative palace at the capital, the largest structure in the City, a building erected at a cost of over $10,000,000. It has three available floors with space of over 200,000 square feet. Manufacturers who exhibited last year declare the exposition the greatest salesman that could be placed in Mexico. During the thirty day period business totalling $5,000,000 was transacted. Conditions in Mexico are even more stable than last year. During that period purchases from the United States amounted to $221,850,000.

This is an opportunity for Canadian firms to place their goods before Mexican purchasers. The Commercial Intelligence Department, Canadian Manufacturers Association, will furnish particulars as to space rates.

Russian Trade Being Freed of Restrictions

The Foreign Trade Bulletin of the American Express Company reports as follows on the present commercial situation in Russia:

"Foreign trade is still nominally under the control of the Commissariat for Foreign Trade, which will undoubtedly continue to handle the Government orders, which are of comparatively large size. It is an easy matter, however, for private firms to obtain the Commissariat's approval of their agreements with foreign sellers, provided they are in a position to pay for their orders.

"According to a recent decree, factories and stocks of goods not nationalized before May 17, 1921, are now free, but in some districts requisitions still continue. These are to be made, however, only against cash payment. In the case of factories, this decree is of small effect, as most factories had been nationalized before the date mentioned. Large factories are usually under the management of a director, whereas smaller ones are mostly leased out to private persons. At the time of the report, about 11,000 such leases were in effect.

"The trade within the country is free with the exception of salt, hemp, wine, gold, silver, platinum, and foreign currency. Poor communications, however, as well as pilferage and theft, the latter two especially on railways and waterways, greatly hinder the development of domestic commerce. Bartering across the border seems to be tolerated by the Russian authorities, while some border States have set up special stations for that purpose. Two foreign trading firms of small capital have recently been established with the assistance of the Soviet."

An Appreciated Compliment

(From The Gleaner, Kingston, Jamaica, February 23rd, 1922.)

"We have the pleasure to acknowledge the receipt of the January number of "Industrial Canada" which is the official publication of the Canadian Manufacturers Association and to recommend it to any of our readers who wish to increase their trade links with the great Dominion. It contains most interesting reports on every conceivable industry and the advertisements should enable anyone easily to get into touch with Canadian Manufacturers. "Industrial Canada" is issued monthly from 1404, Bank of Hamilton Building, Toronto, at a cost of 4 dollars a year—We have not often seen a publication got up in better style than this."

National Foreign Trade Convention

The Consul-General for the United States in Canada has issued an invitation for Canadian business men to attend the Ninth National Foreign Trade Convention of the United States which will be held in Philiadelphia on May 10, 11, 12th, 1922. The Convention is held under the auspices of the Foreign Trade Council which was founded 1914 and has a membership of merchants, manufacturers, railroad and steamship men and bankers, representing all sections of the United States and standing for the general interest of all elements engaged in foreign trade.

The main theme of the Convention will be "Financing and Expanding Foreign Trade," and following are some of the subjects on which addresses will be given: "Effect of High Taxation on the Exchanges", "The factor of depreciated currency in Competition", "Education for Foreign Trade", "Protection against Exchange losses", "Inland waterways as developers of traffic", "Marine Insurance", "Sales promotion through advertising."

Canadian exporters are faced with many of the problems confronting shippers in the United States and it would be worth while to attend this Convention. Further details may be obtained from The Secretary, National Foreign Trade Council, India House, Hanover Square, New York City.

European Conditions and Marine Insurance

Addresses on European trade conditions and marine insurance were the features of the Toronto Export Club's meeting on March 21st. The former subject was covered by C. G. McGhie of the Welland Vale Manufacturing Company, Limited, St. Catharines, Ontario, who had recently returned from a business trip to England, France, Belgium and Germany, where he had made a careful study of conditions as they affect the Canadian exporter.

Mr. McGhie was not very optimistic as to the present possibilties for trade on the Continent. In Germany he found that the depreciated currency was working out to the advantage of the country. This was because within the boundaries of Germany the mark was being kept at a purchasing value of about 4 cents, while its gold value outside fluctuated around .39 cents. This meant that the workman who got 100 marks a day could buy goods to the value of $4 in Germany, while the labour cost of his product when exported was only 39 cents. This was encouraging buying at home, giving the Germans a great advantage in competing for export trade and making it practically impossible for the foreign exporter to do business there.

In other countries with depreciated exchange the situation was not so bad as the purchasing value of their currency had declined with its exchange value. In general, however, he had found that the countries with depreciated currency were the ones that were busy, and they were manufacturing goods which they had previously imported. In general all European countries were keeping trade within their own boundaries and would import goods only when they could see definite advantages in doing so. The trade of Germany, in his opinion, was limited only by the ability to supply, and English manufacturers were doubtful of the permanency of what trade they were getting, as in many cases orders were going to them only because of the uncertainty of German supply.

Speaking of export trade in general, Mr. McGhie said that during his long experience he had found that permanent business could be built up only through direct relations with the foreign customers. His firm had never lost money when dealing directly, but they had lost on occasions when they had done business through export houses.

A. B. Pakenham of the Western Assurance Company spoke on the subject of marine insurance, and urged the necessity of patronizing reliable companies. A number of inexperienced brokers and insurance companies had begun underwriting marine risks during the war when the high profits from war risk premiums made the business particularly attractive. Now that the war was over their inexperience was causing difficulties to themselves and their clients.

The speaker explained the conditions and clauses of the marine insurance policy, showing how rates were fixed according to the vessels, the management of the line, the class of goods, etc.

Referring to the heavy losses from theft and pilferage which had been sustained during the past few years, Mr. Pakenham said that exporters could assist in reducing these by using strong containers and by keeping goods moving. If a package is left on the docks for four or five days before being loaded there is a chance of theft, but if it reaches the docks just in time to catch the steamer, it is generally safe. Some improvement in the matter of theft was being seen in the case of goods sent to England but other ports were still unsafe.

Italian-Canadian Trade from Italian Standpoint

In a recent issue of *L'Espansione Commerciale d'Italia*, published at Rome, there appears a short article directing the attention of Italian importers and exporters to the possibilities of Italian-Canadian trade. As this illustrates the way in which other nations are looking towards Canada for trade openings, it may be of interest to quote from this article in order to show what Italians are thinking.

"The Dominion of Canada is a market little known in Italy, notwithstanding the ever increasing importance which this country is assuming through the development of its immense natural resources, and the vast extent to which this has contributed to the national food supply.

"In 1921 imports amounted to about $1,240,000,000, and exports, which in the years preceding were somewhat less, regained their equilibrium to a great extent with $1,210,000,000, occasioning a movement of about $2,500,000,000.

"As regards Italy, exports from Canada in the period April 1st, 1920 to March 31st, 1921, represented the enormous figure of $57,750,000, some $56,500,000 of which was for grain purchased by our Government. Amongst the buyers of grain Italy, under the Government monoply, occupied in this latter year the third place, immediately after the United States and England. What may happen in the future when freedom of trade in cereals is restored, none can foresee, but it will depend on the attitude of the large Italian buyers and on the conditions which will be made to them on the Canadian market.

"It certainly would be desirable, in the interests of reciprocity, that an understanding should be arrived at in order not to lose a position which is now known and appreciated on both sides.

"Next to grain in order of importance come asbestos, (or amianthus); agricultural machinery, mineral wax, paper pulp, sardines in boxes.

"Undoubtedly the acquisition of Canadian material by Italian buyers has been greatly increased, by what figure does not appear, since this has had to be ascertained through English and American sources rather than by direct means.

"The direct imports from Italy to Canada in the same period, April 1st, 1920, to March 31st, 1921, consisted chiefly of woven goods, and after that of vegetable and animal products and various manufactures amounting to $1,745,000. We are convinced that this would have reached a much higher figure if products of Italian origin, such as silk, raw and manufactured, shipped through Switzerland and France, had been taken into account.

"As the Canadian products required in Italy are not limited in quantity to cereals and in kind to those mentioned, so Italian products which might ultimately be exported there are much more numerous than those that are at present arriving by divers routes.

"We are persuaded that the best way to develop commercial trade is to give to each country the materials which it needs without endangering respective national production.

"Following this criterion, the Canadian products which Italy might ultimately acquire are as follows: wheat, maize, oats, flour, asbestos and by-products, timber for building, for aeronautics and for packing, tinned meats and salmon, furs and skins.

"The Italian products which might ultimately be exported to Canada are: silk, raw and manufactured, wines and liquors, china and crockery, laces, sulphur, asphalt, marble, various art works, textiles, cotton and wool especially, gloves, straw and felt hats, braids for straw hats, glassware, linen textiles, hemp jute, olive oil, castor oil, cheese, tomato sauce, religious ornaments and clothing.

"Canada then is a first class market, and it is to the paramount interest of Italian merchants and manufacturers that they should do their business *direct*, that is to say, not through agents of other nations.

"Trade is singularly well favored—

(1) By a direct line of navigation recently established with regular sailings under the Canadian Pacific Ocean Service and the "Navigazione Generale Italiana" with steamships "Montreal" and "Caserta", in combined service. This line will be maintained.

(2) By the national spirit of initaitive in establishing commercial agencies qualified to open up and develop the trade aforementioned.

"In comparison with the United States, trade with Canada presents the following advantages.

(a) The principal port of Quebec is not further from Italy than the port of New York.

(b) For six months in the year the vessels run as far as the port of Montreal, situated another 300 miles from the sea, and chief commercial centre.

(c) Canadian money is less costly then American money.

(d) The protective tariff in Canada is not as high as the American."

Australia's Big Railroad Problem

The question of a uniform gauge across the Australian continent from Freemantle to Brisbane continues to occupy the attention of the Commonwealth railway authorities, says the Imperial Trade Correspondent at Perth, West Australia. Changes of gauge now occur at four points.

At the recent Premiers' Conference a resolution was passed declaring that the adoption of a uniform gauge was essential to the development and safety of the Commonwealth; that the Comm ssion's recommendation of a 4 ft. 8½ in. gauge was accepted; that a draft agreement should be prepared; and that steps should be taken at once by the premiers to consult their governments with regard to the said agreement and that financial obligation of the parties thereunder.

From particulars placed before the Conference, cost of the proposed conversion of all lines would amount to some £57,000,000; that of providing and equipping a main trunk line between the main states and conversion of all the 5 ft. 3 in. lines in South Australia and Victoria, £21,600,000. The latter scheme was recommended to the States by the federal ministry. A further conference was to have been held in January.

NOTABLE CANADIAN PRODUCTS



Tank Cars for Russia

One of the most interesting orders ever received in Canada was obtained last year by the Canadian Car and Foundry Co., Limited, Montreal, from the Russian Soviet Government. It was for a large number of tank cars for the Russian railways. The illustration shows a consignment of cars on the deck of the S. S. "Canadian Commander," the tanks and underframes being stowed away separately. The tanks have a capacity of 8000 wine gallons each.

Transportation Department Bulletin

Equalization of Eastern and Western Freight Rates

The hearing of the equalization of Eastern and Western Freight Rates case was again resumed on March 13th when counsel for British Columbia presented further material through examination of his witness, Mr. Lewis, as to certain exhibits covering rates on a number of commodities referred to in his case. This was continued until the 14th when arrangements were made for argument. H. J. Symington, K.C. representing the Manitoba and Saskatchewan governments, opened the argument on the 15th and went very fully into the various rate structures East and West. The most important phase of his case is of course the rates on grain and he dealt in greater detail with this point in an endeavor to show that the rates on grain were not only giving the carriers a net earning but that the net earning was more than producers should be called upon to supply. While rates on other articles were chiefly dealt with in a comparative way as between the East and the West, the matter was not argued in as great detail as rates on grain. Mr. McGeer, representing the British Columbia government, followed Mr. Symington on the 21st of March; Mr. Pitblado who is acting for the Winnipeg Board of Trade argued in opposition. The Maritime Province case was dealt with by Messrs. Finn and Rand, representing the Nova Scotia and New Brunswick governments, beginning on March 24th and this is to be followed by the argument of railway counsel beginning on the 27th.

It is of course impossible to make any guess as to the probable outcome of this question which it will be readily appreciated is very complicated and no matter how it is looked at the question arises, as it already has before the Board, if rates are reduced in the West will they have to be increased in the East. The Montreal and Toronto Boards of Trade have been represented at the hearing and have pointed out that, without knowing what action will be taken by the Board in connection with this feature, they are unable to bring before that body any particular line of trade to present their views. It is true that both the British Columbia and Prairie Province phase of the case have dealt with the class rates as well as rates on a number of commodities, but as to what action the Board might deem necessary to take from the evidence submitted is of course impossible to determine and unless some information is available to indicate whether or not rates in say Ontario or Quebec might be increased to compensate for a reduction in the West, it is difficult to determine. The attitude of the Toronto and Montreal Boards of Trade will undoubtedly be if any attempt is made to increase Eastern rates, that such increase should not be allowed to take effect until the interested parties have been given an opportunity of presenting their views in connection therewith.

In arriving at a decision on this particular case the Board is also faced with the reinstating of rates on certain commodities in Western Canada as provided for in the Crow's Nest Pass Agreement by the lapsing of Subsection 5 of Section 325, The Railway Act 1919. The question of whether or not Subsection 5 of Section 325 of the Railway Act shall lapse or be continued is a matter which the government will have to decide before the 1st of July and it is well known that the Prairie Provinces and the Progressive members in the House have indicated that they are strongly opposed to the continuance of this subsection. There is also to be taken into consideration the paragraph in the speech from the Throne dealing with the question of freight rates which intimated that the government were preparing to confer with the railway companies in an effort to secure a reduction in basic commodities. Since that time press dispatches have indicated the possibility of the railway companies arranging with the government to make a substantial reduction in basic commodities provided the Crow's Nest Pass Agreement will not be brought into effect at the present time. This of course is only hinted at in the newspaper dispatch but it is a fact however, that the Canadian Pacific Railway estimates that the working of the Crow's Nest Pass Agreement will mean in the neighborhood of thirty million dollars reduction in revenue. We assume this to be based upon a year's operation of the reduced rates and without considering the reduction in operating costs or increase in business.

It will be readily seen that with these two matters being handled by the Cabinet that the Board of Railway Commissioners may hesitate to make any decision on the equalization case until something definite is arrived at in connection with these other matters.

Delivers Address Dealing with Transportation

An entertaining and instructive address on "Transportation", was delivered before the Electrical Co-operative Society of Montreal on March 1 by Guy Toombs, the Montreal transportation expert. Mr. Toombs devoted the first part of his address to tracing the history of rail and water transportation, both in Europe and America. Dealing with Canada's present railway problem, he said,—

"Owing to the inconsistencies of human nature, the solution is not in sight and it is assuredly not in government ownership and operation, but that is the only course at the moment and much can be done by the active and immediate encouragement of suitable immigration of our own kith and kin to all sections of Canada, not merely to the West; the utilization of the Transcon inental; a reasonable amount of home rule in the different sections of the country (what suits Toronto is not necessarily good for Halifax; the Maritime p ovince man is a decent fellow but he resembles a Sinn Feiner on the railway question); the adoption of a broad-gauge policy; the necessary pruning and reductions; close relations with the shipping public and the exercise of thrift, industry and commonsense generally. The loss in operation of branch lines whose traffic has long departed can be diminished by changes in method of operation and afforestation will restore some of the traffic."

Mr. Toombs dealt also with transportation by water, declaring that this method had decreased, although it was the cheapest way. Illustrating this, he produced figures showing that in 1921 the total amount of freight tonnage carried by water in the United States and Canada was only half of what it was in 1907, and that wher as in 1908, 5,000,000 tons of freight had been transported in Canada alone by water, and 63,000,000 tons by rail, these figures had changed in 1920 to 4,000,000 tons by water and 126,000,000 tons by rail. In conclusion Mr. Toombs outlined the new methods of transportation, namely electric hauling, and moving of freight and passengers by motor truck. With regard to the latter, he said, they had proved their reliability in the great war, and eventually they would haul most of the freight.

Barges Available for New York Loading

The Doty Engineering Co. Limited, Toronto, will have five steel barges (of 500 tons carrying capacity each) available for New York loading on the North Shore of Lake Ontario on the opening of navigation, probably about April 15th.

They advise that they will be glad to consider placing one or more of these boats for loading at Belleville, Port Hope, Toronto or Hamilton should any cargo offer in carload lots or more destined to New York or intermediate ports on the Erie Barge Canal and Hudson River.

For further particulars, application should be made to The Doty Engineering Co. Ltd., York Building, Toronto, direct; who further advise that any freight rates quoted will include marine risk.

Idle Car Situation

The idle car situation for two-week period ending March 1st was as follows:—

Total Cars on Canadian Lines	203.629
Allowance for Bad Order Cars (A.R.A. Basis)	14,254
Actual Bad Order Cars	20,373
Excess Bad Order Cars over A.R.A. Allowance	6,119
Surplus cars in good order	36,301
Total Idle Cars	42,420

The idle car situation for two-week periods ending March 15th is as follows:—

Total Cars on Canadian Lines	203.497
Allowance for Bad Order Cars (A.R.A. Basis)	14,245
Actual Bad Order Cars	20,167
Excess Bad Order Cars over A.R.A. Allowance	5,922
Surplus cars in good order	31,192
TOTAL IDLE CARS	37,114

Exporters Discuss Transportation Problems

At a meeting of the Foreign Transportation Committee of the Canadian Export Club of Toronto, several matters of importance in connection with transportation were taken up.

A letter was read from one of the members stating that his company had been advised by one of the railway companies that for shipments passing through the United States from Canada to other countries in bond it was necessary to furnish the railway company with invoices of value designating the number of packages, contents and value, with information as to destination. This the writer thought was unnecessary. One of the members present said that his firm was still using Form No. 27. which called for only the package number, contents and value without details. The committee agreed that it should not be necessary to give all the information asked for at the first instance.

but suggested that the question be left over until further information was obtained, and requested the secretary to secure copies of Circular No. 1536 issued by the Grand Trunk Railway.

The committee then considered a complaint received from one of the members relative to the poor service given by a Canadian steamship company in shipping goods to Australia. An instance was cited where a boat was booked for direct shipment from Montreal to Sydney on August 30th, 1921. This boat went to New York and remained there approximately one month. There were seveal other delays and it took over four months for shipments to reach Australia. After consideration the committee recommended to the Club that a letter be written to this steamship company, stating that if the Club at large are to continue to patronize this company, they must have the assurance of a more efficient service.

Consideration was then given to the statement of one of the members that marine insurance companies in Montreal were charging higher rates on shipments leaving Canadian ports than were charged by marine insurance companies in London and New York. A report was read stating that the executive of the Montreal Club and District had discussed this question and were of the opinion that the representation was not altogether correct, but that the rates were averaged according to the countries affected, and there were certain cases where Canadian houses charged lower rates than American firms. A letter on this question was also read from a marine insurance firm in Montreal that had been asked to submit a report. This firm stated that the underwriter in Montreal, knowing conditions and through experience, is in a better position to judge at what rates it is possible to profitably underwrite the business; that owing to the present Maritime inactivity firms in New York and London are quoting for business at rates which are much below the cost of doing business, and that the insuring public have also to consider the protection and the various clauses in the policies they receive at the cut rates.

Numerous instances of the disadvantage at which Canadian exporters using our parcel post service are placed as compared with exporters from the United States were brought to the attention of the committee. Considerable information on this question had been gathered, and the committee having carefully considered the question believe that in many instances our regulations are a hardship to the exporter using this service, and recommend that the question is of sufficient importance to be considered by the Club at large with a view to having the subject dealt with by members who are vitally interested.

It was pointed out by one of the members that the shipping public in the United States were not in favour of the two documents under the New Hague rules of 1921 which cover the rail and ocean forms of bills of lading. Opposition has been made against the New Hague Rules on the grounds that they are at variance with the Harter Act which deals with the liability of ocean carriers. Since the Water Carriage of Goods Act in Canada is framed along the lines of the Harter Act, any document at variance with it would be objectionable to the shipping public in Canada. This matter being an important one to the shipping public of Canada, the Transportation Committee of the C. M. A. had appointed a sub-committee, consisting of Messrs. Ingram, Graham and Thorpe to go into the various phases of these documents and prepare a report. It was also suggested that this Committee endeavour to co-operate with committees from the Export Club, Traffic League and Board of Trade.

Industrial Relations Bulletin

Inter - Provincial Conference on International Labour Conference Resolutions

The Labour Ministers of the Dominion and Ontario, as well as Mr. Tom Moore, are urging the necessity of an inter-provincial conference to consider the question of the legislation necessary to give effect to the various resolutions passed at the Washington and Geneva Labour Conference such as those covering 8-hour Day Unemployment Insurance, Old Age Pensions, etc. The only province which has passed any legislation along these lines is British Columbia, but none of the acts come in o force unless, and until similar legislation is passed in the other provinces.

Court of Industrial Relations in Massachusetts

A bill in Massachusetts Legislature seeking to establish a Court of Industrial Relations, modelled after the Kansas Court, has been attacked by Boston Central Labor Union, which has issued appeal to all unions in the state to unite in oppostion against measure.

Rhode Island 48-Hour Week Bill

Rhode Island House of Representatives by vote of 64-25 passed bill, limiting hours of employment of women and children to 48 in any week, with a 52-hour week limitation in seasonal occupations approved by the State Labor Board. The bill which now goes to Senate, was introduced at request of United Textile Workers of America in hope th reby of retaining 48-hour week, which is an issue in present textile strike.

Weekly Family Budget

(Canadian Department of Labour)

	Jan. 1914	Jan. 1921	Dec. 1921	Jan. 1922
Food	$ 7.73	$14.48	$11.00	$11.02
Fuel and Lighting	1.90	4.17	3.55	3.53
Rent	4.83	6.60	6.90	6.92
Total, including laundry	$14.49	$25.30	$21.49	$21.52

Strikes in Canada—January 1922

	Strikes	Employees	Days lost
January, 1922	23	3357	76,070
December, 1921	17	2883	64,733
January, 1921	21	1736	30,065

International Trade Unionism in Quebec

As a result of the strike of the International Union printers in Quebec the Quebec Government has taken up the question of assisting Canadian labour men to break away from the International Unions. The idea is that, if necessary, a substantial sum of money should be contributed by the Quebec Government to compensate the Canadian members of International Unions for the money they have paid in insurance premiums, etc., to the International Unions. In this connection it may be recalled that experience has shown that only a fraction of the money contributed by Canadian members is spent in Canada. No definite action was taken at this session of the Legislature. Both sides of the House were in agreement so far as favouring strictly Canadian unions was concerned.

Employment and Unemployment in Canada

For the fortnight ending 4th February, 6,133 firms with a total payroll of 658,471 showed an increase of 19,951 workers, or 3.1%. The gain was a result of the reopening of the railway car shops. The index number of employment for the fortnight was 81.6 as compared with 78.9 for the period ending 31st January, 1922 and 89.0 for 14th February 1921. (January 17th, 1920—100).

Trade Unionism

At annual convention of Associated Dress Industries of America, it was estimated that strikes in the industry in 1921 involved losses approximating $24,000,000.

Australian Arbitration Court

The various states of Australia have recently agreed to establish a Court of Federal and State Judges to determine the basic wage and standard hours in any or all industries. The setting up of this court is being vigorously opposed by the trade unions who are said to consider that the new scheme will involve the destruction of the Federated Unions.

8-Hour Day Law in France

The Labour Committee of the French Chamber of Deputies is investigating the question of suspending the 8-hour day law. The former Minister of Commerce in urging repeal stated that the law had been passed hastily on political and not on economical grounds, whereas the question was essentially economical and should be settled on the basis of scientific research.

Predicts End of Strikes

Mayor Parnell of Winnipeg dealt with the problem of capital and labor on March 19 at the Chalmers Presbyterian Church. His worship said he hoped to see the day when co-operation between capital and labor would bring about the abolition of strikes. Such consummation, he believed, was quite possible. It could only come about, however, by the spirit of co-operation permeating both employers and employed. His worship thought that about 70 per cent. of those controlling industry were already seized of this necessity and the remainder eventually would have to fall into line.

Mayor Parnell expressed regret at the attempt to abolish the Joint Council of Industry. He thought this body had succeeded in keeping the city relatively free from strikes during recent years and, if that were so, the cost of its up-keep was well worth while. It would pay to have the council even if it only prevented a single strike.

News from the Tariff Department

Board of Customs Decisions

Booklet containing descriptive illustrations of the motion picture entitled "The Four Horsemen of the Apocalypse" per sample, declared dutiable under tariff item No. 178 at the rate of 15 cents per pound.

"Glaxo", a powdered or desiccated milk, declared dutiable under tariff item No. 43 at the rate of 3¾ cents per pound under the General Tariff.

Aladdin Mounted Wick, reinforced, for use on Aladdin Lamps, Models No. 3, No. 4, No. 5 and No. 6, per sample, 25% under the General Tariff.

Fig Paste, unsweetened, and Apricot Paste, unsweetened per sample, declared dutiable under tariff item No. 93 at the rate of 25% under the General Tariff.

Departmental Rulings

"Chipp-e-wa" table salt, free running, manufactured by the Ohio Salt Company, Wadsworth, Ohio, and "Chrystaline" table salt, free running, manufactured by the Crystaline Salt Company, Ithaca, N. Y. in cartons, ruled to be dutiable under tariff item No. 220, at the rate of 25% under the General Tariff.

Sales Tax Rulings

The Department of Customs and Excise has issued the following circular re Candy Manufacturers, Florists and Retail Furriers.

"Under the terms of a judgment recently delive ed by the Exchequer Court of Canada, candy manufacturers who sell by retail only are held to be accountable for sales tax on all sales of candy manufactured by them. An appeal was entered against said judgment, and dismissed by the Supreme Court of Canada.

"The Department will therefore hold retail candy manufacturers accountable for the tax on all such sales on and after the 1st April, 1922.

"Florists and retail furriers who manufacture for stock, or for resale, will be held similarly accountable.

"The Department will not require payment of tax prior to the above mentioned date in cases where retail candy manufacturers, florists, or furriers, have not collected the tax from their customers.

"Refunds will not be granted in respect of tax already paid to the Department."

Regulations re Imported Hides and Skins

New regulations have been adopted by an order-in-council dated the 4th of February, and passed on recommendation of the Minister of Agriculture, regarding the importation of foreign hides and skins. The new regulations are to come into effect on and after the 1st of May next. These regulations replace the ones which were adopted by order-in-council of August 9th, 1920.

Regulations Re Imported Wool and Hair

New regulations have been enacted by order-in-council dated the 4th of February, and passed on recommendation of the Minister of Agriculture, regarding the importation of foreign wool and hair. The regulations are to take effect on and after the 1st of May next.

Anyone interested in the matter of importations of foreign hides and skins or foreign wool and hair may obtain particulars of the new regulations on application to the Tariff Department of the Association.

New Invoice Requirements for New Zealand and Newfoundland

New Zealand: The attention of firms exporting to New Zealand is directed to the new form of invoice and certificate of value and origin, which the customs regulations of New Zealand require to be used in connection with shipments of goods into New Zealand.

The new form of invoice and the certificate of value and origin are identical with those recommended for adoption by the Imperial Customs Conference, 1921. The effect of the new form of invoice now required, is to make it compulsory to state thereon the current domestic value of the goods exported as well as the selling price to the importer, whether these amounts are the same or not. Particulars of certain charges are also required to be stated on the invoice.

The New Zealand Customs state that with respect to all goods liable to ad valorem duty, and which are imported on and after April 1st, 1922, such duty will be based on the current domestic value of such goods in the country of exportation. Attention is also directed to the requirement in Clause 4 of the Certificate of Value and Origin, which requires particulars to be stated as to the amount of any drawback or remission of duty which has been or will be allowed by the revenue authorities in the country of exportation. These particulars are required in order that any such amount may be deducted from the current domestic value in assessing the value of goods for ad valorem duty purposes in New Zealand.

Combined Certificate of Value and of Origin to be Written, Typed or Printed on Invoices of Goods for Exportation to New Zealand

CERTIFICATE OF VALUE AND OF ORIGIN

1. (1).....of (2).....of (3)..... manufacturer [supplier] of the goods enumerated in this invoice amounting to hereby declare that I (4) have the authority to make and sign this certificate on behalf of the aforesaid manufacturer [supplier] and that I have the means of knowing and do hereby certify as follows:—

VALUE

1. That this invoice is in all respects correct and contains a true and full statement of the price actually paid or to be paid for the said goods, and the actual quantity thereof.

2. That no different invoice of the goods mentioned in the said invoice has been or will be furnished to anyone; and that no arrangements or understanding affecting the purchase price of the said goods has been or will be made or entered into between the said exporter and purchaser, or by anyone on behalf of either of them either by way of discount, rebate, compensation or in any manner whatever other than as fully shown on this invoice, or as follows (5).....

3. That the domestic values shown in the column headed "Current Domestic Values" are those at which the above mentioned firm or company would be prepared to supply to any purchaser for home consumption in the country of exportation and at the date of exportation identically similar goods in equal quantities, at (6).....subject to.....per cent cash discount, and that such values include [exclude] the cost of outside packages, if any, in which the goods are sold in such country for domestic consumption.

4. That the said domestic value includes any duty leviable in respect of the goods before they are delivered for home consumption, and that on exportation a drawback or remission of duty amounting to.....has been [will be] allowed by the revenue authorities in the country of exportation.

ORIGIN

(Delete whichever of 5 (a) or 5 (b) is not applicable. If 5 (a) is used delete 6 and 7, if 5 (b) is used insert required particulars in 6 and 7.)

5. (a) That every article mentioned in the said invoice has been wholly produced or manufactured in (7).....

5 (b). That every article mentioned in the said invoice has been either wholly or partially produced or manufactured in (7).....

6. As regards those articles only partially produced or manufactured in (7).....

(a) That the final process or processes of manufacture have been performed in that part of the British Dominions.

(b) That the expenditure in material produced in (7)..... and [or] labour performed in (7).....calculated subject to qualifications hereunder, in each and every article is not less than one-fourth of the factory or works costs of such articles in its finished state.

7. That in the calculation of such proportion of produce or labour of the (7)..... none of the following items has been included or considered—

"Manufacturer's profit or remuneration of any trader, agent, broker or other person
"dealing in the articles in their finished condition: royalties: cost of outside packages
"or any cost of packing the goods thereinto: any cost of conveying, insuring,
"or shipping the goods subsequent to their manufacture.

Dated at.....this.....day of.....192....

Witness..... Signature.....

(1) Here insert Manager, Chief Clerk, or as the case may be.
(2) Here insert name of firm or company.
(3) Here insert name of city or country.
(4) These words should be omitted where the manufacturer or supplier himself signs the Certificate.
(5) Here insert particulars of any special arrangement.
(6) Here insert "warehouse", "factory" or "port of shipment".
(7) Insert "United Kingdom" or name of other part of British Dominions.

Newfoundland: The Newfoundland Customs has adopted a new form of invoice for use in connection with shipments to that colony. The form is identical with the one which has been adopted by the New Zealand Customs, and which is shown on the previous page. The Newfoundland Custom salso require a certificate of value to be written, typed or printed on invoices of goods for shipment to Newfoundland. This certificate appears on this page.

Full information respecting the tariffs and invoice requirements of New Zealand and Newfoundland are on file in the Tariff Department of the Association.

Made-in-Canada Endorsed by Retailers

As illustrating the progress that the Made-in-Canada movement is making in all parts of Canada, the following resolution passed at a recent convention of the Nova Scotia Branch, Retail Merchants' Association, is significant,—

"WHEREAS, the obligations imposed by Canada's participation in the great war have added tremendously to the burden of the country, making it vital to the national well-being that Canadian money should be kept in Canada to the largest possible extent, and that Canadian people should, as far as economically practicable, make the goods which Canadians require, using Canadian raw materials, developing Canadian natural resources and employing Canadian labour, to the end that our national wealth be conserved, fostered and promoted, and the burden of taxation lightened; and

"WHEREAS, with the decline of war business Canada's favorable trade balance has gradually reverted towards the unfavorable pre-war status, largely through the persistance of the public in buying imported products, and that the unfavorable balance on our foreign account is making it impossible for Canada to restore an effective gold standard; and

"WHEREAS, it has been estimated that the adverse rate of exchange has lost to Canada last year alone not less than $125,000,000 in the cost of imported commodities, the burden of which must be borne by the mass of the Canadian people; and

"WHEREAS, an active support of a "Made-in-Canada" movement would not only tend greatly to solve the employment problem by providing employment for more workers in Canada on the farm and in the factory, but would bring increased business to Canadian railroads, banks, merchants, and every class of the community, enlarge the home market and make possible production at lower unit costs, thus reducing the cost of commodities, increase the taxable income of the country and ease the burden of taxation correspondingly, and result in a development of Canada which would attract new capital for investment in the country:

"THEREFORE, the Convention pledges to support with all the influence at its command, and urges all individual retail dealers in Canada to support the "Made in Canada" movement; to give preference in every possible case to Canadian made goods; to become fully acquainted with such goods, and place their merits before the consumer whenever possible, providing always that the trading policy of the Canadian manufacturers is found to be just and equitable."

Combined Certificate of Value to be Written, Typed or Printed on Invoices of Goods for Export to Newfoundland.

CERTIFICATE OF VALUE

I, (1).....of (2).....of (3)..... manufacturer [supplier] of the goods enumerated in this invoice amounting to..... hereby declare that I (4) have the authority to make and sign this certificate on behalf of the aforesaid manufacturer [supplier] and that I have the means of knowing and do hereby certify as follows:—

VALUE

1. That this invoice is in all respects correct and contains a true and full statement of the price actually paid or to be paid for the said goods, and the actual quantity thereof.

2. That no different invoice of the goods mentioned in the said invoice has been or will be furnished to anyone; and that no arrangements or understanding affecting the purchase price of the said goods has been or will be made or entered into between the said exporter and purchaser, or by anyone on behalf of either of them either by way of discount, rebate, compensation or in any manner whatever other than as fully shown on this invoice, or as follows (5)

3. That the domestic values shown in the column headed "Current Domestic Values" are those at which the above mentioned firm or company would be prepared to supply to any purchaser for home consumption in the country of exportation and at the date of exportation identically similar goods in equal quantities, at (6).....subject to.....per cent cash discount, and that such values include [exclude] the cost of outside packages, if any, in which the goods are sold in such country for domestic consumption.

4. That the said domestic value includes any duty leviable in respect of the goods before they are delivered for home consumption, and that on exportation a drawback or remission of duty amounting to.....has been [will be] allowed by the revenue authorities in the country of exportation.

Dated at.....this.....day of.....192....

Witness..... Signature.....

(1) Here insert Manager, Chief Clerk, or as the case may be.
(2) Here insert name of firm or company.
(3) Here insert name of city or country.
(4) These words should be omitted where the manufacturer or supplier himself signs the Certificate.
(5) Here insert particulars of any special arrangement.
(6) Here insert "warehouse", "factory" or "port of shipment".

* **FORM OF INVOICE FOR NEW ZEALAND AND NEWFOUNDLAND**

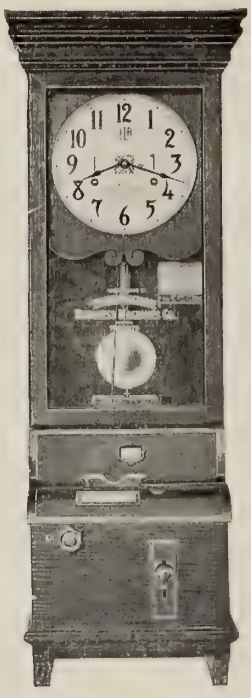
Country of Origin	Marks and Numbers on Packages	Quantity and Description of Goods	Current Domestic Values in Currency of Exporting Country. (See pars. 3 and 4 of certificate		Selling Price to Purchaser	
			At	Amount	At	Amount

Enumerate the following charges and state whether each amount has been included in or excluded from the above current domestic value:—

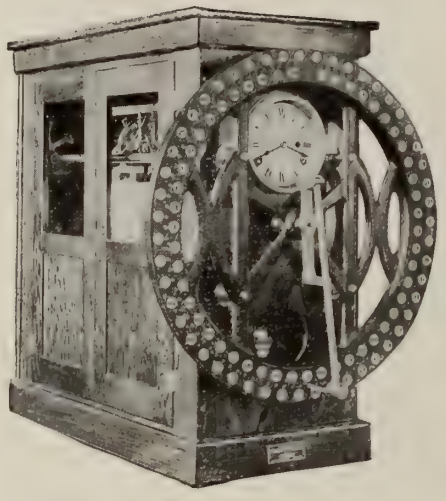
	Amount in Currency of Exporting Country	State if included
(1) Cartage to rail and [or] to docks		
(2) Inland freight (rail or canal) and other charges to the dock areas, including inland insurance.....		
(3) Labour in packing the goods into outside packages.....		
(4) Value of outside packages.....		
(5) If the goods are subject to any charge by way of royalties		

State full particulars of royalties below:—

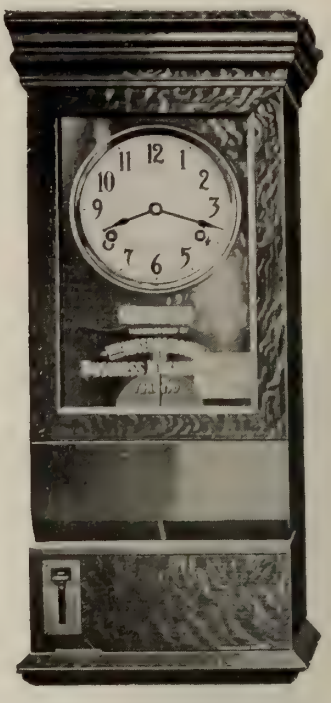
(*) (Here insert usual particulars, including place and date, name and address of supplier, etc.)



International Card Time Recorder



International Dial Time Recorder



International Job Time Recorder

TWO MINUTES

IS what it will take to write us a letter of inquiry asking how we can make the minutes of working time you pay for render full value to you and increase your profits.

TWO MINUTES—that's all—it will prove to be the most profitable TWO MINUTES you have spent this year. We know this from the ever increasing volume of testimony from our users.

BACK TO BED ROCK

Such is the price reduction of International Time Recorders, ranging from $10 to $85 according to type and style.

Think of it—a high grade International Time Recorder that will take care of either a large or a small payroll for $150.

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For your convenience we have Service and Sales Offices in VANCOUVER, WINNIPEG, WALKERVILLE, LONDON, HAMILTON, TORONTO, OTTAWA, MONTREAL, QUEBEC, HALIFAX, ST. JOHNS, Nfld., ST. JOHN, N.B.

Also manufacturers of International Dayton Scales and International Electric Tabulators and Sorters.

"Our competitors can't afford costly time leaks —can we?"

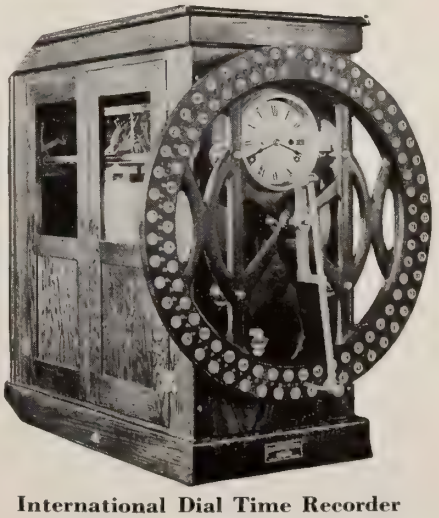


NO business can afford to be without International Time Recording Equipment in these times. Directing heads of business must give the closest attention to their costs—particularly their working time costs.

Are YOU stopping every time leak in YOUR business? You may be reasonably certain that your competitors are doing so. That is, you'll find them employing International Time Recorders to get the full labor time for which they pay. Can you afford to let them thus bring down and keep down their costs to a point below yours?

A word to present users of INTERNATIONAL TIME RECORDERS

You cannot afford to neglect your equipment. You cannot treat a Time Recorder as most men treat their watches—that is, wait until they stop before having them overhauled. We respectfully urge that our thousands of present users have their equipment carefully looked over, thereby assuring themselves of the best possible service. And, further, they should see that they have sufficient equipment to avert congestion and unnecessary losses in walking time.



International Dial Time Recorder

International Business Machines Co., Limited

FRANK E. MUTTON, Vice-President and General Manager

Head Office and Factory, 300 CAMPBELL AVENUE, TORONTO

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Exporters Hold Interesting Meeting at Windsor

A one-day session of the United Exporters of Western Ontario was held at the offices of the Border Chamber of Commerce, Windsor, on February 22. Mayor Wilson of Windsor and Col. W. L. McGregor, president of the Border Chamber of Commerce, extended a welcome to the delegates.

J. J. Foot, McClary Manufacturing Co., London, president of the organization, who acted as chairman, touched lightly upon the amazing industrial development which had characterized Ontario during recent years, and predicted that, in the comparatively near future, Ontario was likely to become an industrial counterpart of the New England States, with their miles upon miles of busy factories.

He then referred to the inception of the United Exporters of Western Ontario. This was inspired by a realization of the economic importance of export trade; the great field for its intelligent development, and the real need for a frank and friend y interchange of information among exporters so that they might assist one another as much as possible.

He emphasized the fact that w th increased export business there would be better business conditions throughout Canada and less unemployment. Although the export business of our country had expanded remarkably of recent years, it was still in embryo. Naturally, its deve opment took time and much hard, thoughtful effort; but, such effort, if properly extended, was far more than well worth while.

It was repeat orders that told the tale. If we were making good in a market, such repeats would come along. In all countries, we must carefully strive to observe the requirements of customers. Give them precisely what they want; not what was thought might be successfully substituted.

In the case of tria orders, no matter how small or seemingly trifling, the greatest care should be taken, and the utmost service given. In most cases, big business had its commencement in just such trial orders. Above all keep faith with foreign customers and thus perpetuate the proverbial policy of Old Country exporters that had won for them a universal reputation for square dealing. As a matter of fact, this policy had actually made the British Empire.

H. R. Poussette, director of Commercial Intelligence, Ottawa, dwelt at considerable length upon the trade commissioner service, and the process of intensive preparation through which junior commissioners were passed ere taking a foreign appointment under an experienced commissioner for a couple of years. After that, if they had made good, they were considered competent to take over a commissionership of their own. The young men now selected were all university graduates; men of good standing and presence, capable of taking their position in good society. Formerly, appointments to the service were political and frequently disappointing because appointees had not always the necessary qualifications.

P. N. Mainguy, export manager for the Ford Motor Co. of Canada, impressed the vital importance of good packing. This was a matter with regard to which Canadian exporters were exceedingly backward. They had a great deal to learn. The package which would take goods safely from Windsor to Toronto, could not be trusted to take similar goods to South Africa or Australia. British and European exporters, realizing the business-killing effect of poor packing, took particular care to have it so that it would carry goods safely to destination, withstanding such handling as they ordinarily received in transit. His own firm had undertaken several tests of packing, some of which were very drastic. Nevertheless, the result derived from such tests was most valuable. He spoke of the Hazzard testing machine, and described same as a sort of squirrel cage in which packages were revolved to test their strength. He suggested that the Department of Trade and Commerce, might do well to install such an apparatus for the benefit of exporters so that they could have their packages duly tested out.

The speaker then dwelt lightly upon the advantages which would result from the institution of a preferential tariff arrangement between Canada and Australia, for which Canada was now striving. He felt that the co-operation of export clubs in the matter might be of real assistance to the Government at this moment. What we wanted from Australia was the same tariff treatment which that country now extended to Great Britain. This would enable Canadian manufacturers to compete in a market which was now almost a closed door to them.

O. E. Fleming, K. C., president of the Canadian Deep Waterways and Power Association, was the principal speaker at the luncheon given at noon, his address being devoted to a discussion of the many and material advantages of opening up the Great Lakes to ocean steamships.

G. C. Cochlan, district freight agent, Canadian Pacific Railway Co., Detroit, was the first speaker at the afternoon session. He spoke on the extensive facilities offered by transportation companies and their relation to the development of export trade. His address is published in full on page 54.

Following Mr. Cochlan, F. C. Salter, Manager, Foreign Department, Canadian National Express Company, Montreal, briefly indicated the most helpful services which the express companies could render shippers who were striving to get into foreign markets. They were conducting great work as advance agents in export development. The companies were willing to act as distributing agencies at the other end; do all customs work, attend to all collections, and otherwise act for exporters. This at a very reasonable charge. They possessed a world-wide organization and had their men right on the spot, so that they were naturally familiar with local conditions and with the standing of importers.

The express companies had low rates for samples. Personally, Mr. Salter felt that such rates could not well be too low. The encouragement of the sample business would unquestionably reflect advantageously upon the express companies in the increase of bulkier traffic.

Alexander Marshall, Commercial Intelligence Department, Canadian Manufacturers' Association, Toronto, then spoke briefly. He referred to the great usefulness which might be achieved by export clubs and sections, and the urgent need for their most thoughtful and energetic co-operation toward the expansion of Canada's foreign trade. There was nothing very difficult about export business. Did we go after such business with the same energy as we did after domestic business, our success would be a foregone conclusion. However, half-hearted or intermittent effort never would accomplish much.

At the conclusion of the meeting, the chairman announced that each of the gentlemen who had addressed the gathering would be prepared at any time to assist shippers with any information in their power. Mr. Mainguy thanked the visiting delegates, especially those who had spoken, and Mr. Ivy of London moved a vote of thanks to the Border Cities for their hospitality. This was seconded by Mr. Shepperson of Brantford.

Hoaxed

Clerks at the King Edward Hotel, Toronto, were mystified recently when several distinguished, but foreign-looking, gentlemen sought information as to the whereabouts in the hotel of a meeting of Poles. At least, they said they had heard that such a gathering was to take place and they asserted that no such meeting could be considered complete without their presence as local leaders in the Polish community. Later it developed that the gentlemen must have been the victims of a hoax, for the meeting proved to be one of the Canadian Polish Manufacturers' Association.

Export Club of Toronto Hears Address on Mexico

C. Noel Wilde, of the Department of Trade and Commerce, who is now assistant trade commissioner to the Argentine, was the principal speaker at the February meeting of the Canadian Export Club of Toronto, held on the evening of the 21st. in the C. M. A. offices. Mr. Wilde spoke on "Trade Possibilities in Mexico" Having lived several years in Mexico and having also represented the Department of Trade and Commerce on the Commission which recently investigated the Mexican market, he was well qualified to deal w th this subject.

Mr. Wilde outlined the present political, financial and commercial conditions of Mexico, went into details in regard to the opportunities for specific Canadian products in Mexico, and at the conclusion of the address answered many questions asked by members of the Club. In general Mr Wilde was very optimistic about the possibilities for Canadian trade with Mexico. To get the trade, the Canadian exporter must send representatives to visit the importers, merchants and manufacturers and the speaker assured those present that the feeling of the Mexican Government toward Canada was one of real friendliness and the Government could be relied upon to give the Canadian as much assistance as was in their power. A full report of Mr. Wilde's add ess and the discussion which followed has been sent to all members of the Export Club.

At the same meeting, Alex. Marshall, secretary of the Canadian National Export Club, brought up the question of requesting that a special session of the annual convention of the C. M. A. be d voted to a discussion of export trade problems. He stated that it would be possible to have addresses by a few prominent manufacturers who had returned from foreign markets and also that some remarks by a prominent banker who had an intimate knowledge of the export trade situation would be of value. The majority of those present endorsed this idea, and Mr. Marshall was requested to bring this to the attention of the General Secretary of the Association.

Peterborough Manufacturer Talks About Cloth

A talk on the manufacture of cloth, with special reference to the industry in Canada, was given before the Retail Merchant Tailors' Association in Toronto on February 16 by Edgar Worth, general manager of Canadian Woollens, Limited, Peterborough. In the course of his remarks, Mr. Worth, said,—

"It has given me great pleasure to be asked to speak to you at your convention which is being held at the same time as the Textile Products Exhibition. Especially so as you are the very men who practically control the situation as regards our Canadian cloth being

used, because after all when a customer comes into your stores for a suit, he relies very much on your judgment. If the cloth looks attractive to him and the price is satisfactory, he does not generally bother himself whether it is made in Canada or any other place, so that a great responsibility lies upon you gentlemen in furthering the woollen cloth industry in Canada.

"After what you have seen exhibited at this exhibition, I feel sure that you must feel satisfied that cloth can be manufactured as well in Canada as anywhere else, if we are given the opportunity. Unfortunately, there is a prejudice in Canada in favour of cloth from Great Britain. I think this prejudice is more marked in cloth than probably any other product that we use. This, of course, is a great credit to the British manufacturers, and there is no doubt that they are very clever manufacturers, but I fully believe that if Canadian manufacturers are given the opportunity they can manufacture just as satisfactory cloths as any other place.

"You might say that you cannot get as wide a range of styles in this country that you can when buying abroad. The answer to this is that, if the woollen mills in Canada were given proper support, you would get all these styles, because the mills that are here now would enlarge, and naturally other mills would commence operation. That is the only reason to-day why we do not make wide ranges of cloth, because, after all, most of the better class of cloths have come in from England, and it is not a matter of price either, because the Canadian cloths are very seldom dearer, quality for quality, than the cloth coming from England. It happens more often than not that cloths are made cheaper in Canada. Of course, we are helped to some extent in this by the tariff, but the tariff is a very small factor if we could overcome this prejudice in favour of imported cloths which is the biggest protection in favour of the British or foreign manufacturer. If we could only get that word "imported" eliminated from our vocabulary when selling goods, it would be the greatest blessing you could give to this country.

* * *

"In conclusion I would again ask you to give us your co-operation in trying to establish this industry in Canada. There are a great many manufacturers and employees anxious to see Canadian cloths given their rightful place. For the fiscal year ending March 31st, 1921, according to the Tariff Dept., there was practically $62,000,000 worth of manufactured woollen goods brought into Canada. A great percentage of this was cloth. Of course, there will always be some cloths that have to be imported, but let us get it down to a minimum. In the United States they cut this out by means of a very high tariff. You might say that this makes the people have to pay more for their cloth. This is not so: internal competition takes care of this, and today cloths can be bought in the United States, even with the high tariff, practically as cheap as Canadian or English cloths."

Montreal Industry Entertains its Employees

Employees of the Berliner Gramophone Company, Montreal, spent a gala evening on February 28, when the entertainment facilities of the big plant were thrown open for their use. The event took the form of a combination skating carnival and masquerade dance and some 500 friends and employees of the company were present. The crowd came arrayed in a great variety of attractive costumes and were greeted on arrival by E. M. Berliner, vice-president; J. G. White, assistant sales manager; J. P. West, advertising manager; W. Walker, office manager and J. Dumochel, branch manager. The entertainment commenced on the company's rink and later was continued on the second floor of the plant, which had been tastefully arranged for the dancers. Prizes were given for the best costumes and the whole affair helped to cement the good feeling existing between the company and its employees.

St. Thomas Industries are All Hopeful

A questionaire on conditions sent out to the manufacturers of St. Thomas by J. R. Harmer, managing secretary of the local Chamber of Commerce, has brought in some encouraging information. Practically all departments of industry, with the possible exception of lumber, report a more favorable outlook.

Woodenware industry finds good indication of increase in business, with a prospect of doing export business again.

Oil companies find outlook splendid. In the foundry business, plants are operating an increase of one day per week over January.

Phonograph manufacturers report outlook good and confectionery manufacturers say outlook is much better than in 1921.

In the auto accessories industry, the prospects are the best ever had. Metal signs have splendid outlook.

Pork packers find business normal and the shoe trade has good outlook for spring, some of the larger buyers showing a disposition to place spring trade immediately.

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William McMaster Visits New Zealand

William McMaster, who has long been a prominent member of the Montreal Branch, C. M. A., is at present on a tour of the world and in a letter written on January 7 gives some impressions of New Zealand.

"For a country that is only 90 years old," he writes, "it has made wonderful progress. It is comparatively a rich country, and though conditions are, as in a great many other countries, bad—when the turn comes—it will come into its own again if the Government will only stop legislating and not endeavor to be so paternal. As likely you know, it has been prosperous for a long time, over twenty years, with few breaks. The world's markets were buyers of its primary products, mainly mutton, beef, wool, hides and butter. Now, dependent on these, having comparatively no industrial life, with the low prices, they realize that changes must be made to bring about economies."

"I think some of the troubles of the times are a result of too much law-making, through the several governments having pressure from one class and then another. A week's work is 44 hours. The Arbitration Board adjudicates on most everything. If you build one or more houses or stores, after they are erected, the 'A.B.' appraises the values and says the amount of rent you can ask. Result, there is no construction except for use of owner. The Government between fifteen to twenty years ago started a railway from the west coast to Christchurch to give employment. It is not yet finished, and it has cost five times what was the original estimate and will not begin to pay for the amount of business to be secured. The intention was no doubt good, but the taxpayer will have to subscribe.

"The Government has 50,000 employees. This represents about one in every six of the population dependent on the Government. Now necessity demands reduction in the ranks and adds to the unemployment. 'Thrift and economy' is being preached by the Government and the banks, but legislation will now allow employer and employee to get together. The Board of Arbitration fixes the rates of wages. Some of the industrials, on account of short hours and high wages, are not paying and have shut down. If the employees, realizing the position, were willing in that case to agree on a different basis, it cannot be done, as both employer and employee would be subject to a fine for not carrying out the law, as the rates and hours cover all New Zealand. On legal holidays men get paid for no work. In a case of necessity, one does the work, and he or she gets double pay added to what he or she is entitled to, so that for a man getting 20 bob a day his remuneration would be 60 shillings. Now the taxpayers are grumbling, as taxes have been getting higher and higher. There is coal of a very good quality in the mines, but on account of strikes, etc., the Government and others had to import 100,000 tons last year. The price of run-of-mine coal at the pit mouth is 70 shillings per ton.

"Not much chance of competing in manufacturing. A company—industrial or mercantile—making a profit of £10,000 or over per annum, irrespective of the capital has to pay 8s 9d in the £ If owner of the property, the company pays a land tax. A newspaper men told me that he paid nearly 10s 5d out of every pound sterling he or his company made. How would you like that?

"Prices for clothing, boots and shoes, tobacco, cigars, etc., are high. Meat cheap and butter as low as 6d per lb.; for mutton and beef, 1s 3d to 1s 6d per lb."

New Steel Industry for Sarnia

An important industrial enterprise has just been announced by the formation of the Dominion Alloy Steel Company, Limited, who are planning the erection of a plant at Sarnia, Ontario, with an initial capacity of 50,000 tons per annum. They have secured a site of 250 acres and are now clearing the ground in preparation for building.

There has developed within the past few years a great demand for high-grade alloy steel and the production of this is dependent on an abundant supply of cheap electric power. For these two reasons the Canadian manufacture of the product is logical, particularly when the manufacture of automobiles is on the increase.

The authorized capital of the company is $15,000,000, half preferred and half common and shares will shortly be offered to the public. The directors are: Harry R. Jones, president, United Alloy Steel corporation; C. H. Wills, president, C. H. Wills Motor Company; J. J. Mahon, formerly chief engineer, Crucible Steel Company of America; G. A. Simpson, Sir William MacKenzie, Bert H. McCreath, Col. W. McBain, W. W. Jones and W. B. Boyd.

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We possess unusual facilities for manufacturing standard and special electrical equipment. Two examples of our latest Electric Range and Service Table are illustrated here. We will gladly furnish complete information and submit plans for laying out your Kitchen or receipt of your request—this service is free. Address attention our "Kitchen Equipment" Department.

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The Pulse of Business in Canada

Bank Clearings

Windsor and Kitchener the only Cities to show Increases during February

Compared with the same month of 1921 only two Canadian cities, Windsor and Kitchener, Ontario, reported gains in bank clearings for February. Total clearings of the 28 cities decreased by $146,535,376, or 11.3 per cent.

Clearings in Eastern Canada were $850,742,323, which is $123,643,820 or 12.6 per cent. under those of February, 1921. Western clearings, at $297,886,885, were 7.1 per cent. less than last year The heaviest declines in the West were at Calgary and Brandon, in each of which cities clearings were 23.9 per cent. lower than last year. Following are the totals for the 28 cities with comparisons:—

EASTERN BANK CLEARINGS

	Month of February	Decrease over '21	Inc. P.C.
Toronto	$355,870,256	$ 53,032,079	12.9
Montreal	371,533,806	51,406,993	12.1
Ottawa	23,815,290	6,072,928	20.3
Quebec	19,652,048	3,503,829	15.1
Hamilton	19,023,565	2,938,685	13.3
Halifax	11,820,337	1,700,347	12.5
St. John	9,917,219	924,020	8.5
Windsor	11,678,540	x391,346	3.4
London	10,590,722	829,461	7.2
Brantford	3,745,715	1,159,784	23.6
Sherbrooke	3,299,440	994,006	23.1
Kitchener	3,658,260	x186,250	5.07
Monston	3,576,306	801,213	18.3
Peterboro	2,520,819	858,171	25.4
Total	$850,742,323	$123,643,820	12.6
Kingston	2,469,575		

xIncrease.

WESTERN BANK CLEARINGS

	Month of February	Decrease over '21	Inc. P.C.
Winnipeg	$174,296,090	$ 1,596,463	.90
Vancouver	49,721,093	3,497,861	6.5
Calgary	18,870,665	5,920,160	23.9
Edmonton	15,915,552	2,587,685	13.9
Regina	10,441,554	3,160,057	23.6
Saskatoon	5,666,214	1,056,661	15.7
Victoria	7,788,389	1,622,145	17.2
Moose Jaw	4,087,645	788,183	16.1
Ft. William	2,820,345	644,234	18.5
Lethbridge	1,941,971	461,921	19.2
N. Westminster	1,908,569	532,638	21.8
Brandon	1,985,555	625,941	23.9
Medicine Hat	1,242,675	313,954	20.1
Prince Albert	1,200,600	83,653	6.5
Total	$297,886,885	$ 22,891,556	7.1
Total East	850,742,323	123,643,820	12.6
Grand Total	$1,148,629,208	$146,535,376	11.3

Railway Earnings

Two of the Transcontinental Lines Show Decreases in Gross Earnings for February

Gross earnings of the Canadian Pacific and Canadian National Railways were lower during February as compared with the same month last year. Earnings of the Grand Trunk Railway were higher by $68,709. Following are the February figures for the three transcontinental lines:—

	1922	1921
Canadian Pacific	$10,923,000	$12,394,000
Canadian National	7,471,399	10,810,994
Grand Trunk	7,658,359	8,589,650
Total	$26,052,758	$30,794,644

Steel Ingots and Castings

Production during January Declined by Almost 10,000 Tons from December Total

The production of steel ingots and castings in Canada during January declined almost 10,000 tons from the quantity reported for the preceding month. The actual output was 33,011 tons of ingots and castings, comprising 31,160 tons basic open-hearth ingots, 3 tons bessemer ingots, 902 tons basic open-hearth castings, 90 tons bessemer castings and 856 tons of electric steel castings or a total of 31,163 tons of steel ingots and 1,848 tons of direct steel castings. Practically the whole output was made by the producing firms for their own further use. Small tonnages of castings were produced for direct sale, the amounts credited in this column being 838 tons basic open-hearth castings, 89 tons bessemer castings and 847 tons of the electric castings, a total of 1,774 tons of castings.

The average monthly production of steel ingots and castings during 1921 amounted to 56,000 tons, so that the January production was only about 60 per cent. of the average production during the preceding year.

During the last week of the month a better buying movement was observed in several Canadian centers, particularly in connection with machine tools and certain machines. Equipment makers stated that business was becoming somewhat stronger and that in several cases additions had been made to their working staffs.

Fire Losses

February Total of $4,062,400 is Higher than for Same Month Last Year

Fire losses in Canada in February totalled $4,062,400, according to *Monetary Times'* records. This figure is made up as follows:—

Fires with loss of $10,000 or over	$3,428,500
Small fires reported	133,900
Estimate of unreported fires	500,000
	$4,062,400

The February loss is higher than any last year, and, with that of January, makes $7,659,400, or more than that for the first three months of 1921.

Trade Returns

Imports and Exports during February Show a Further Decline

Another decline in Canadian trade is shown in February, the grand total of $101,298,728 falling almost 37 million dollars behind the figure for February, 1921. Imports were about 17½ millions lower and exports over 19 millions less than for the same month last year. For the eleven months ended February, 1922, foreign merchandise exported was $12,378,148, domestic merchandise exported, $680,701,367 and imports, $668,425,606, making a grand total of $1,361,505,121. The summary for February follows:—

IMPORTS ENTERED FOR HOME CONSUMPTION

	Month of February 1921 Free	1921 Dutiable	1922 Free	1922 Dutiable
Agricutural and vegetable products, mainly foods	$ 1,948,755	$ 8,715,173	$ 1,795,926	$ 4,813,711
Agricultural and vegetable products, other than foods	2,210,303	6,771,436	2,169,866	2,445,982
Animals and animal products	880,915	2,813,373	2,173,752	2,700,696
Fibres, textiles and textile products	2,262,066	7,915,852	3,367,528	9,168,710
Chemicals and chemical products	891,470	1,009,354	771,128	959,470
Iron and steel, and manufactures thereof	2,175,389	11,610,505	504,384	7,067,862
Ores, metals and manufactures, other than iron and steel	681,143	2,003,785	949,373	1,530,749
Non-metallic minerals, and products	5,498,131	7,597,627	4,674,062	4,139,672
Wood, wood products, paper, and manufactures	1,202,870	1,964,713	808,616	1,484,921
Miscellaneous	1,831,443	1,986,204	1,024,620	1,743,272
Total	$19,582,485	$52,388,022	$18,239,255	$36,055,000
Duty collected		$10,285,460		9,846,731

EXPORTS

	Month of February 1921 Domestic	1921 Foreign	1922 Domestic	1922 Foreign
Agricultural and vegetable products, mainly foods	$27,418,615	$ 68,954	$14,962,586	$ 28,105
Agricultural and vegetable products, other than foods	988,618	16,943	1,197,994	153,825
Animals and animal products	10,519,301	94,326	7,482,783	83,795
Fibres, textiles, and textile products	976,733	207,288	319,886	52,756
Chemicals and chemical products	966,049	47,700	786,266	11,549
Iron and steel, and manufactures thereof	3,821,966	332,592	2,704,933	239,654
Ores, metals and metal manufactures, other than iron and steel	2,882,646	74,729	3,204,735	63,494
Non-metallic minerals, and products	1,688,800	37,603	1,388,466	87,814
Wood, wood products, paper and manufactures	15,000,909	38,323	13,406,863	38,869
Miscellaneous	974,101	158,994	591,937	198,163
Total	$65,237,738	$ 1,077,452	$46,046,449	$ 958,024

Bank Statement

Further Shrinkage in Banking Business Shown by January Report

A further shrinkage in banking business and resources is shown by the January report of Canadian chartered banks to the Government. The decrease in demand deposits was larger than in December, running over $53,000,000, but savings deposits showed a decrease of only about $7,500,000. Deposits outside Canada declined by almost $16,000,000, making a total decrease of over $77,000,000.

Current loans in Canada are down by about $36,000,000, while outside Canada there is an increase of over $3,000,000, bringing the total up to almost $32,000,000.

The month's summary follows:—

	Jan., 1022	Dec., 1921	Jan., 1921
Reserve fund	$ 126,425,000	$ 128,373,499	$ 133,343,590
Note circulation	162,645,115	184,602,546	206,175,821
Demand dep.	487,153,169	540,942,522	584,025,710
Notice deposits	1,233,208,401	1,240,807,268	1,313,093,870
Deps. out. Can.	254,777,696	270,721,507	318,622,947
Current coin	77,650,371	78,851,283	85,118,010
Dom. notes	192,587,600	195,703,154	186,589,527
Dep. C. G. R.	47,652,533	68,452,533	89,702,533
Call loans Can.	102,630,461	113,071,089	112,474,318
Call loans out	157,913,228	169,859,037	191,854,003
Cur loans Can.	1,138,151,455	1,174,053,434	1,264,490,463
Cur. loans out	148,733,747	145,343,054	173,379,729
Total liabilities	2,351,594,675	2,472,350,424	2,642,380,435
Total assets	2,626,110,129	2,746,732,605	2,926,867,072

Pig Iron and Ferro-Alloys

Decline in Production Continues in January, Striking New Low Level

The year-end decline in the production of pig iron was carried into the new year and the output of pig iron in January dropped still further to a new low level at 32,184 long tons, all made in blast furnaces, as compared with 39,917 tons in the preceding month.

The production of basic iron which constituted the most important grade fell off to 22,933 long tons made for the use of firms reporting and 204 tons made for sale, a total of 23,137 tons as compared with 30,698 tons in December. The production of foundry iron for sale was 9,047 tons, this item showing an increase to more than double the preceding month's production, which was only 2,948 tons. No malleable iron was produced in January, while in December a total of 6,271 tons was reported. Ferro-alloys made during the month were only slightly lower in quantity than in December, the total production amounting to 604 tons, all of which was ferro-silicon.

Building Conditions

Contemplated Work and Contracts Awarded in February Show Encouraging Advances

The volume of contemplated new work reported in Canada during February according to figures compiled by MacLean Building Reports, Limited, amounted to $27,011,200 compared with $22 391.600 in January. The value of contracts awarded in February amounted to $10,718,300 and represents an encouraging advance on the January figure of $8,392,600. A comparison by provinces for the month shows Ontario conspicuously in the lead, as follows:—

	No. of Projects	Value
Ontario	496	$6,516,900
Quebec	152	1,946,700
British Columbia	165	1,297,100
Alberta	43	491,000
Manitoba	19	354,000
Saskatchewan	5	56,500
New Brunswick	4	37,500
Nova Scotia	2	19,000
Total for Dominion	886	$10,718,800

EXPERTS

Commercial Photographers and Artists. Photos of Interiors. Exteriors. Plants in Operation, Travellers' Samples and Catalogue Work. Furs and Fashions on Living Models a Specialty. Results Guaranteed. Phone or write for appointment and samples of work. MILLAR STUDIO, J. A. Miller, Mgr., 10 Hospital St., Montreal. Main 1526.

Clean Oil, Quickly Available



Manufacturers are assured of an easily available supply of clean oil when they install Bowser Fig. 172's in their plant. Equipped with either a 25 or 54 gallon tank, it can be installed in any convenient corner and take a minimum of floor space.

The air-tight, all-metal construction, eliminates oil losses through leakage and gumming. The Piston-Type Measuring Pump eliminates spillage in transfer and assures accurate measurement.

It is especially designed for convenient, dust-proof service of oil in the operating room.

For all-around, get-at-able service, manufacturers will find the Bowser Fig. 172 a profitable investment.

Write for Illustrated Booklet C.17

Bowser Equipment is MADE IN CANADA by

S. F. BOWSER CO., LTD., 1768 Fraser Ave., Toronto, Ont.

BOWSER
ESTABLISHED 1885
PISTON-TYPE MEASURING PUMPS

Wholesale Prices

Index Numbers Show a Rise, Principally in Foodstuffs

The index number of wholesale prices in Canada constructed by Prof. H. Michell of McMaster University, stood at 158.9 for the month of February, showing an advance of .5 per cent. from the previous figures, 158.4 for January. This figures compares with 197.8 for February, 1921, and 123.1 for February, 1913.

Among the twenty foodstuffs advances were registered in flour, pork, bacon, lard, butter, beans and canned peas, and declines in potatoes and eggs.

Among the twenty manufacturers' goods, advances were registered in wool and cotton and declines in rubber, iron, galvanized sheets, silver, copper, tin, zinc, pine and maple.

The monthly index number of wholesale prices for exports, issued by the Canadian Bank of Commerce, had risen from 147.17 on January 15th to 150.43 on February 15th; that for imports had fallen from 147.88 to 146.65 during the same period, and the combined number for imports and exports had risen from 147.52 to 148.04.

Business Failures

Number Reported by Bradstreet's in February and March Double Last Year's.

Business failures, as reported by Bradstreet's for the last three weeks of February and the first two weeks of March, continue to show an increase. For the period under review the total number of failures, 348, was 2 more than double the number for the corresponding period last year. Below are given the weekly figures for the two years:

Week Ended	1922	1921
February 9	68	31
February 16	65	46
February 23	79	41
March 2	55	38
March 9	81	17
TOTAL	348	173

Pulp and Paper

Exports from Canada during January Show Decline in Value

Canadian pulp and paper exports for January were valued at $8,831,480, as compared with $9,663,054 in January, 1921, and with $10,325,533 in the preceeding month of December. Newsprint gained 207,193 cwts. in volume but lost $1,565,682 in value this year as compared with last, while pulp exports gained 805,025 cwts. in volume and $1,280,119 in value.

Below are given comparative details for the month:—

Paper	January, 1922	January, 1921
Newsprint	$4,966,352	$6,532,034
Book Paper	784	109,205
Other Paper	410,329	847,919
Total Paper	$5,377,465	$7,489,158

Pulp	January, 1922	January, 1921
Sulphate (kraft)	$ 699,943	$ 426,827
Sulphate, bleached	1,072,091	526,839
Sulphate, unbleached	631,910	824,094
Mechanically prepared	1,140,071	396,136
Total Pulp	$3,454,015	$2,173,896
Grand Total	$8,831,480	$9,663,054

Dominion Linens, Limited

Slight Decrease in Earnings Shown by Annual Statement for 1921

For the year ended December 31st, last, a small decrease in earnings is reported by Dominion Linens, Limited, earnings of $56,820 comparing with $58,872. From this amount there is appropriated $3,310 as reserve for depreciation, $19,000 as a general reserve, $2,000 as a reserve for doubtful accounts, $4,357 written off deferred expenses and $5,000 off trade marks and goodwill. These deductions leave net profits $22,152 as compared with $25,075 in 1920. The sum of $24,500 is distributed as dividends on the preferred, while $6,422 is set aside for Federal taxes, leaving a deficit made up from last year's balance of $35,619. The balance at credit shown by the statement under review is $26,399.

The balance sheet shows a further strengthening of the company's position, with assets valued at $993,912 compared with $945,064. Accounts and bills receivable have increased from $38,366 to $65,295. Inventories are also higher at $326,878, as compared with $291,496. Bank loans have increased from $30,000 to $95,894. Accounts payable show a substantial reduction from $64,308 to $14,438. The balance owing subsidiary company has increased from $42,774 to $54,844.

Recent Industrial Fires

Several Serious Losses Sustained during Past Month in Manufacturing Plants

A number of serious fires have occurred in industrial plants during the past month, the largest loss occurring at the Dominion Arsenal, Quebec, where a fire on March 1st wiped out the Dominion Cartridge Company plant and another on March 9th caused damage estimated at $200,000 to the main plant.

On February 26th a fire at the plant of the Swift Canadian Company, Limited, Toronto, demolished the dressing-rooms, cooperage and hog floors and badly damaged the ice-making plant and runway. The loss was between $35,000 and $40,000.

The planing mills, flour and grist mills and stables of Pyatt & Hart, Wiarton, Ontario, were totally destroyed on March 11th and on March 20th the sawmill of the Kastner Lumber Company in the same town was burned. The losses were respectively $20,000 and $6,000.

W. B. Powell

Former Banker Becomes General Sales Manager of McCaskey Systems, Limited

W. B. Powell, for a number of years manager of the Imperial Bank, Galt, has severed connections with this institution to take up the position of general sales manager with McCaskey Systems Limited, Galt, manufacturers of account systems, professional systems and adding machines.

Mr. Powell has been indirectly associated with the manufacturing concerns of Galt, and is a man qualified with splendid business ability for sales manager in this rapidly growing and progressive business. He entered his new duties early in the new year, and is making splendid progress in his new position.

Resumes Presidency

Col. H. Cockshutt again President of Cockshutt Plow Company, Limited

At a meeting of directors of the Cockshutt Plow Company, Limited, held in Toronto on March 8th, Col. H. Cockshutt resumed the presidency left vacant by the death of George Wedlake. E. A. Mott was appointed general manager and is also first vice-president. G. K. Wedlake was appointed second vice-president and will hold this position along with that of works manager.

Mr. Mott has been with the company for 32 years, starting as junior clerk. Mr. Wedlake, who has 24 years of service to his credit, has for a long time had full charge of the designing and development of the company's product.

Opening Montreal Office

The Steel Trough & Machine Company, Limited, Tweed, Ontario, announce that they are opening an office in Montreal to take care of their Quebec business. R. L. Welch will be in charge of this office and his address will be Room 216, St. Nicholas Building.

Egmont L. Frankel

Egmont L. Frankel, general manager of Frankel Brothers, Toronto, has recently been elected president of the Non-ferrous Metals Division, Waste Trade Dealers' Association of America. This honour is quite an achievement for so young a man and Mr. Frankel deserves the congratulations of his business associates.

At the annual meeting of Canada Foundries & Forgings, Limited, held in Brockville, on February 28th, Harry B. Housser of Toronto was elected as a new director in place of Hon. W. J. Shaughnessy of Montreal, who retired at his own request.



Bond and Ledger Papers in the reams cut to standard sizes are packed in wooden cases for shipment.
No. 12 (Final of this Series)

"From Rags *to* Writing Paper"

WRAPPING AND PACKING. Reams of 500 sheets each are wrapped and packed in cases for transportation to the printer. Those who have read these little sketches will be better able to appreciate the art, science and care necessary to the production of High Grade Writing Papers for all purposes.

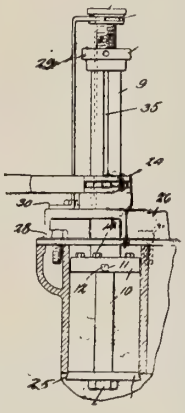
Write for Brochure of manufacturing illustrations sent free on request—"From Rags to Writing Paper"—It tells the story in detail.

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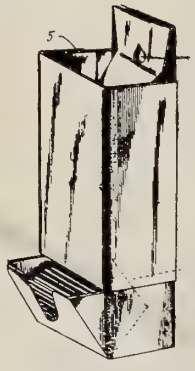
MILLS AT ST. JEROME, P.Q. and MONT ROLLAND, P.Q.

Makers since 1882 of Superfine Linen Record and other High-Grade Papers

PATENTS FOR SALE



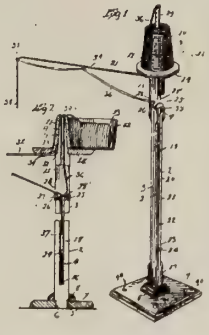
REBORING-MACHINE. This invention relates to improvements in reboring machines for reboring cylinders, and consists of a supporting rod having a disk on one end thereof, said disk having inclined surfaces to cause the same to seat within one end of the cylinder, a tubular member supported on the supporting rod, cutting blades carried by the tubular member and adapted to be secured to the upper surfaces of a cylinder, means for rotating the tubular member and cutting blades, a bracket member having connection with the relatively large head and having a right angled upper extremity, a threaded head positioned in the right angled upper extremity, said supporting rod having a threaded portion extending through the threaded head, and said rod adapted to be threaded through the threaded head where the same drops through the cylinder. Write Mr. W. A. Gallemore, Coeburn, Va., regarding Canadian patent pending similar to United States patent 1,375,839.



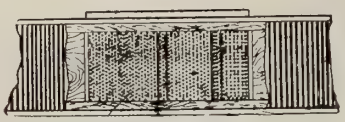
WALL MATCH BOX: This invention relates to improvements in match boxes and comprises a match box consisting of an outer rectangular casing adapted to receive a rectangular match holder member adapted to slide into said casing, one end of the base of said holder member being extended to form a cover when said match box is closed and adapted to form a holding tab for engagement on a nail when said match box is in use, and the other end of the base of said interior holder member having an extended winged end portion, said extended winged end portion being adapted to be bent outwardly from the end of said casing and its winged portions being V-slotted and said V-slots adapted to lock said portions in such bent position. For particulars regarding sale of Canadian patent communicate with Mr. F. L. Robinson, P.O. Box 179, Richmond, Quebec.



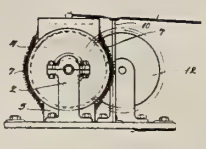
PLIERS: This invention relates to improvements in pliers and comprises a pair of lever arms pivoted together and formed with offset jaw members, the outer edges of which are provided with channels on their outer faces and on one side reamed to form a circular bore extending nearly through the said jaw members adjacent the pivot of the jaws, leaving relatively thin portions, the confronting edges of which are ground to form shearing blades. Write to Mr. John F. Martin, 12 Elliot Row, St. John, N. B., Canada, who has Canadian patent for sale.



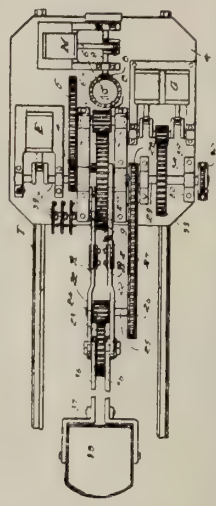
TWINE HOLDERS: This invention relates to devices for supporting cones or balls of twine over a shop or store counter, and has particular reference to supports equipped with means for automatically pulling up clear of the counter or shelf the loose end of said twine. The object of the present invention is to provide a more stable holder than heretofore provided, and one resting on a post or pedestal that may be firmly mounted on a counter or shelf at any convenient point along same instead of being suspended from a ceiling. Another object is to provide a holder which may be inexpensively made out of wood in suitably ornamental designs, which conceals the retracting weight, and which embodies other features and advantages that cannot be derived from wirework construction and the like. Messrs. A. E. Osterberg and G. A. Oberg, P. O. Box 391, Norway, Michigan, have Canadian and United States patents for sale.



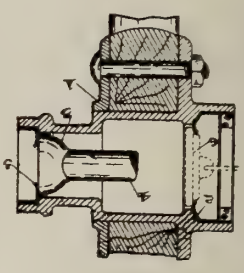
CONCENTRATOR. This invention relates to improvements in a concentrator, the combination with a longitudinally inclined sluice having an opening in one of its side walls and a longitudinally horizontal depression in the bottom wall thereof communicating with the opening of said depression having its lower wall transversely inclined downwardly toward the opening, of an amalgamating tray adapted to be arranged on the lower wall of said depression and projecting through the opening to permit of the discharge of water therefrom and to effect the equal distribution of values deposited on said tray. Mr. John W. Pollock, c/o National Soldiers' House, Sawtelle, California, U. S.A., would be pleased to receive enquiries regarding the sale of his Canadian and United States patents.



ATTACHMENTS FOR WICK-LAMPS: This invention relates to attachments for wick lamps, and has for its main object the provision of a means for extinguishing the same so as to prevent the dangers incurred in common method of blowing out the lamps, and the structure comprises a frame having a vertical slot therein, a boss slidable in said slot and having strings attached thereto, wings hingedly mounted to the upper part of said frame and having coiled springs normally holding said wings in their lowermost position, one of said strings being attached to each of said wings. For full information regarding sale of Canadian and United States patents write to Mr. Andrew Czarniecki, P.O. Box 115, Plymouth, Pa., U. S. A.



DIGGING MACHINE: This invention relates to improvements in digging machines comprising a platform, a table rotatably supported thereby, a member mounted on the platform and rotating about a substantially horizontally disposed axis, means for rotating the member, an arm having an end portion fixed to said member movable in a vertical direction therewith, a second rotatable member supported by the opposite end portion of the arm, a second arm having one end portion fixed to said second rotatable member, means for rotating said second rotatable member, and a digging element carried by the outer end portion of the second-named arm, the means for rotating the second-named member operating independently of the means for rotating the first-named member. Mr. Albert Peppin, P. O. Box 537, Iron River, Mich., U.S.A., would be pleased to receive inquiries regarding the sale of his Canadian and United States patent.



TOOL FOR REMOVING THE CUPS OF BALL RACES: This invention relates to improvements in a tool for removing ball cups from wheel bearings comprising a cup engaging head having opposite sides sufficiently cut away to enable it to pass endwise through an annular cup, and a handle pivotally connected to the back of the head to enable the head to be passed through a cup and afterwards turned to engage the back of the same. For full particulars regarding sale of Canadian Patent write to Mr. George Dyer-Hurdon, Port Franks, Ont., Canada.



TROLLEY: This invention relates to improvements in trolleys, comprising in combination with a pole and an arm extending from the end thereof and offset relative thereto, of a harp mounted to rotate on and supported by the arm, a trolley wheel journalled within the harp, oppositely extending guard fingers upon the pole and concentric with the axis of rotation of the harp, the ends of the fingers normally extending past the periphery of the wheel, an arm mounted to swing with the harp, means for holding the harp and wheel in a pre-determined position relative to the pole. Mr. Geo. B. Nussbaum, 132 S 10th St., New Philadelphia, Ohio, U. S.A., would be pleased to receive enquiries regarding the sale of his Canadian and United States patents.

Harold C. Shipman & Co., Patent Attorneys, Ottawa, Canada

(SEND YOUR PATENT AND TRADE MARK ENQUIRIES AND APPLICATIONS DIRECT TO US AT OTTAWA AND SAVE TIME AND MONEY BY OUR PERSONAL ATTENTION BEFORE THE PATENT OFFICE.)

Blue Sky Law

By H. Macdonald
Legal Secretary Canadian Manufacturers' Association

AS it is officially announced by the Hon. W. E. Raney, Attorney General for Ontario, that a bill on blue sky law is to be introduced in the present session of the provincial legislature a general historical reference to the subject may not be in-appropriate.

The origin of the business of buying and selling stocks and shares, in which a large proportion of the population of this country is now directly or indirectly interested, is to be traced to the creation of the British National Debt towards the end of the seventeenth century. It was then that William the Third introduced a system, which his Dutch ancestors had found useful a hundred year earlier, of borrowing money at interest from his subjects, for the purpose of waging war and subsidising other nations to form a coalition against Louis XIV of France.

The profession of stock brokers which sprang into existence about the year 1693 was not then held in high repute by most, and the literature of the time is rich in allusions of an uncomplimentary character. Dr. Johnson, in the first edition of his dictionary, defined a stock-jobber as a "low wretch who gets money by buying and selling shares in the funds."

This prejudice was even expressed in legislative enactments, for in 1734 an act was passed against stock-jobbing which imposed penalties upon those found guilty of practices which at the present time are entered into almost hourly. Even as late as 1834 a bill passed both British houses, of Parliament entitled "An Act to prevent the Infamous Practice of Stock Jobbing," which sought to prevent the making of contracts between persons not actually possessed of stock or sufficient money for the sale or purchase of stock at a future period.

There were various other measures passed with the same or similar objects, and it was not until 1884 that the City of London's authority over the brokers was ended, for then was passed "An Act for the Relief of the Brokers of the City of London", and the annual lincense which brokers had had to pay from time immemorial was abolished.

Since the passing of the Joint Stock Companies Acts of 1862-64, which, with earlier measures, greatly increased the facilities for the investment of peoples savings, the growth of the business of dealing in stocks and shares has been enormous, and the general knowledge of the stock exchange business has naturally increased. Probably the increase in knowledge has been more marked in the last twenty years, than in any other similar period since 1855, when the first Joint Stock Companies Act was passed, by which the liability of shareholders was limited to the extent of their stake in the enterprize.

When it is considered that under the federal system established by the British America Act, commercial companies may be incorporated under no less than ten different acts (the Dominion Companies Act and the companies acts of the nine provinces) it will readily be seen that the task of regulating so important and diverse a branch of commercial law is one of considerable difficulty.

The insidious danger of the so-called blue sky legislation is that it sets up certain standards by which securities shall be judged by the Government, and experience shows that, when once issues can be passed under these regulations, they are regarded by investors as bearing something in the nature of a Government guarantee. Further, experience with legislation of the blue sky order appears to have been that in cases, certain issues are passed which are not sound, while others which offer a sane proposition to the investor are ruled out because of technical objections.

Mining securities which would often come under the ban of blue sky law, and which are always speculative in character, should be so recognized by the public. Mining development would probably suffer under legislative regulation rigidly enforced and result in serious loss and prestige to the country.

In considering the dangers of blue sky legislation, it does not follow that all possible safeguards are now being exercised for the protection of the investing public. The more rigid enforcement of the present fraud laws, with more severe penalties if not adequate in all cases, would do much to clean stock promotions.

Barnjum Offers Prizes

Last month reference was made to the generous offer of Frank J. D. Barnjum of Annapolis Royal, N. S., of $2.00 per acre to the farmers of Nova Scotia for planting seedlings. Since then Mr. Barnjum has gone a step further and is offering a series of prizes for essays on forest conservation and for other efforts in the direction of saving our forest wealth. His offer is as follows,—

"Open to any citizen of Canada.

"A prize of $1,000 divided as follows: $500 first prize; $250 second prize; $150 third prize, and $100 fourth prize for the best essay on the regulation of the forest fire menace with suggestions for the enactment of laws for the prevention of the same; or for any other methods for the protection and retention of our homegrown forests for our home industries. Judges to be the two provincial foresters of Quebec and New Brunswick, the dean of the faculty of forestry of the University of Toronto, and the director of the dominion forestry branch; essays to be mailed to my address on or before June 1, 1922, prizes to be awarded and paid July 15, 1922. For the help and information of those who are not familiar with this particular subject, I will mail my bulletins on conservation free on application.

"In the Province of Nova Scotia.

"A prize of $250 in cash for the best municipal or town forest plantation, plantations to be made this spring and prize to be awarded September 15, 1922, the judges to be the commissioner of crown lands of Nova Scotia and Professor M. Cumming of Truro.

"A prize of $250 in cash to the chief fire ranger whose district shows the most efficient organization and best results, and showing proportionately the least fire loss as determined by his activity in fire-fighting, and application of the best preventative methods, the prize to be awarded and paid on the 30th day of November, 1922, and the judge to be the commissioner of crown lands of Nova Scotia.

"A cash bonus of $2 per acre to the farmers of Nova Scotia for every acre of spruce or pine seedlings planted by them on their farms the coming spring of 1922, no one farmer to be paid a bonus on more than 100 acres, so as to distribute the plantings as widely as possible over the province. Location and method of planting must be approved by government forester of Nova Scotia, if one is appointed, otherwise by Mr. Barnjums Forester, to insure satisfactory results.

"In the Province of New Brunswick.

"A prize of $250 in cash for the best municipal or town forest plantation, planting to be done this spring, and prize to be awarded September 15, 1922, the judges to be the minister of lands and forests of New Brunswick, the professor of forestry, University of New Brunswick, and the provincial forester of New Brunswick.

"A prize of $250 in cash to the chief fire ranger whose district shows the most efficient organization and best results, and showing proportionately the least fire loss as determined by his activity in fire-fighting, and by the application of the best preventative methods, the judge to be the provincial forester for the province of New Brunswick, prize to be awarded and paid on November 30, 1922.

"In the Province of Quebec.

"A prize of $250 in cash for the best municipal plantation, planting to be done this spring, and prize to be awarded September 15, 1922, the judges to be the minister of lands and forests of Quebec, the director of the school of forestry, Laval University, Quebec, and the chief forester of Quebec.

"A prize of $250 in cash to the chief or district fire ranger whose district shows the most efficient organization and best results and showing proportionately the least fire loss as determined by his activity in fire-fighting, and by the application of the best preventative methods, the judge to be the chief forester of Quebec, and prize to be awarded and paid on November 30, 1922."

The British Empire Trade Ship

It is expected that the British Empire Trade ship will sail from London, England in August 1923 for a trip to the principal ports of the world. The voyage is projected to South America, the Cape, Australia and New Zealand and from there to Japan, China, Philippines, Java, Straits Settlements, India and back to England by way of the Suez Canal, making calls at the principal ports. This ship has been specially designed, will have a tonnage of 20,000 tons and will comply with the requirements of the British Board of Trade and the International Convention for passenger vessels.

On the four main exhibition decks there will be laid out exhibition stands and show cases, and the stalls will be so arranged that all visitors to the exhibition can pass before each stall in the ship. Accommodation for trade representatives and exhibition officials is provided on the upper decks of the vessels. Moreover the whole exhibition space will be subdivided for the various branches of industry as soon as the requirements of each branch can be estimated by the applications for space.

The standard exhibition site is (8 ft. x 6 ft. 3 ins.) and rentals range from £1,350 to £2,100 according to location. The charge for show cases varies from £600 to £725. For representatives travelling on the ship an inclusive charge will be made covering cabin accommodation and the provision of meals on board ship. A ticket for a standard size 2-berth cabin will cost about £1,500. Recently we have been advised that as there has already been a substantial reduction in the cost of construction, the above prices have been cut 33 1-3%.

It has been provided that firms in the overseas Dominions may arrange for space and send representatives. The Head Office of the Canadian Manufacturers Association have descriptive booklets of the ship which they would be glad to send to interested members.

The Goldstein Manufacturing Company, Limited, Toronto, have moved into their new building at 12-18 Beverley Street, where they will specialize in the manufacture of copper and brass tubing, seamless drawn. They will be the only firm in Canada manufacturing this material.

Canada Spool & Bobbin Co., Limited, Walkerton, have completed and shipped $10,000 order for spools to the United States.

ANNUAL REPORT

BANK OF HAMILTON

50th YEAR

FEBRUARY 28th, 1922

PROFIT AND LOSS ACCOUNT

Balance at credit of Profit and Loss Account, 28th February, 1921	$ 139,264.95
Profits for twelve months ended 28th February, 1922, after deducting charges of management, interest accrued on deposits, rebate on current discounts, and making provision for bad and doubtful debts	850,672.12
Premium on New Stock	890.00
	$ 990,827.07
Disposed of as follows:—	
Quarterly Dividends, Nos. 128, 129, 130 and 131 at rate of 12% per annum	$ 599,953.78
To Pension Fund, Annual Assessment	23,407.66
War Tax on Bank Note Circulation	19,984.94
Transferred to Reserve Fund—From Premium on New Stock	890.00
To Bank Premises Account	100,000.00
Balance of Profits carried forward	216,590.69
	$ 990,827.07

RESERVE FUND

Balance 28th February, 1921	$ 4,849,110.00
Premium on New Stock	890.00
	$ 4,850,000.00

GENERAL STATEMENT

LIABILITIES

To the Public:		
Notes of the Bank in Circulation		$ 4,659,386.00
Deposits not bearing interest	$17,073,202.85	
Deposits bearing interest, including interest accrued to date of statement	46,837,100.07	
		63,910,120.92
Balances due to other Banks in Canada		231,925.52
Balances due to Banks and Banking Correspondents in the United Kingdom		78,220.54
Balances due to Banks and Banking Correspondents elsewhere than in Canada and the United Kingdom		240,561.79
Acceptances under Letters of Credit		143,137.85
		$69,263,352.62
To the Shareholders:		
Capital Stock paid in		$ 5,000,000.00
Reserve Fund		4,850,000.00
Balance of Profits carried forward		216,590.69
Dividend No. 131 payable 1st March, 1922		150,000.00
Former Dividends Unpaid		812.00
		$79,480,755.31

ASSETS

Gold and Current Coin	$ 1,442,633.64
Dominion Government Notes	7,591,258.00
Notes of other Banks	477,651.00
Cheques on other Banks	2,466,806.19
Balances due by other Banks in Canada	458,074.28
Balances due by Banks and Banking Correspondents in the United Kingdom	45,556.34
Balances due by Banks and Banking Correspondents elsewhere than in Canada and the United Kingdom	733,857.77
	$13,215,837.22
Dominion and Provincial Government Securities, not exceeding market value	6,047,508.31
Canadian Municipal Securities, and British, Foreign and Colonial Public Securities other than Canadian	3,111,954.48
Railway and other Bonds, Debentures and Stocks, not exceeding market value	374,123.85
Call and Short Loans (not exceeding thirty days) in Canada, on Bonds, Debentures and Stocks	5,834,533.11
	$28,583,956.97
Loans to Cities, Towns, Municipalities, and School Districts	4,264,692.75
Other Current Loans and Discounts in Canada (less rebate of interest)	41,664,077.20
Real Estate other than Bank Premises	692,684.28
Overdue Debts, estimated loss provided for	235,343.59
Bank Premises, at not more than cost, less amounts written off	3,128,807.33
Deposit with the Minister of Finance for the purposes of the Circulation Fund	250,000.00
Liabilities of Customers under Letters of Credit as per contra	143,137.85
Other Assets not included in the foregoing	518,055.34
	$79,480,755.31

JOHN S. HENDRIE,
President.

J. P. BELL,
General Manager.

AUDITOR'S REPORT

In accordance with the provisions of sub-sections 19 and 20 of section 56 of the Bank Act, 1913, we report to the shareholders as follows:—

We have audited the above Balance Sheet and compared it with the books and vouchers at Head Office and with the certified returns from the Branches. We have obtained all the information and explanations that we have required, and are of the opinion that the transactions of the Bank which have come under our notice have been within the powers of the Bank.

We have checked the cash and verified the securites representing the investments of the Bank, at its Chief Office and principal Branches at a date other than that of the verification at the Chief Office on the 28th February, 1922, and found that they were in agreement with the entries in the books of the Bank relating thereto.

In our opinion the Balance Sheet is properly drawn up so as to exhibit a true and correct view of the state of the affairs of the Bank according to the best of our information and the explanations given to us, and as shown by the books of the Bank.

C. S. SCOTT, F.C.A.
of C. S. Scott & Co.

E. S. READ, C.A.
of George A. Touche & Co.

AUDITORS

Hamilton, 16th March, 1922.

Canada's Industrial Expansion

A RECORD OF PROGRESS

Biscuit Factory Expands

George Weston, Limited, Complete two-storey Addition to Toronto Factory

George Weston, Limited, biscuit and cake manufacturers, Toronto, have enlarged their factory by the addition of a two-storey brick building costing between one hundred and one hundred and ten thousand dollars. The new structure has been built with a temporary roof as it is the company's intention to carry it up to the full height of their present factory in the near future.

As soon as new machines and ovens which have been bought are received the extended facilities of the plant will be put into operation. The new addition will house a complete biscuit plant which, the company hope, will be capable of giving them the most up-to-date biscuit lines in Canada. They will be able to bring out some new lines and are looking forward to doubling their present output.

Are Now Operating

Canadian Match Company, Limited, Pembroke, Ontario, Are Marketing Their Product

The Canadian Match Co., Limited, Pembroke, Ont., who were granted incorporation with a capital of $1,000,000 last November, have started a large sales force to work throughout the provinces. The new company have been operating their plant at Pembroke, Ontario, steadily since last fall but the product was not placed on the market until a sufficient supply of manufactured matches was on hand, ready to meet the initial demand. They have now a large supply of goods ready to meet the expected business. So far the production has been confined to one brand, known as the "Maple Leaf" match, put up in large and small boxes, but the company will produce also a "strike-on-box" or safety match, which will be known as the "red-top."

Sir Alexander Maguire was chosen president of the new company and A. G. Woodruff, who came to Pembroke from Savannah, Ga., is vice-president and in charge of the plant. B. Chandler Snead of New York is secretary. Among the directors are a number of prominent English and Canadian capitalists. The new industry at Pembroke is employing a large staff of workers and will also create a market for large quantities of soft wood.

When Maguire, Paterson & Palmer (Canada) Ltd., Pembroke, Ont., splint manufacturers, incorporated a year ago it was rumored that they would embark in the match manufacturing branch, but new plans were made and the Canadian Match Co., Limited, a distinct enterprise, was formed, representing the Diamond Match Co., in the United States, Bryant & May of England and Maguire, Paterson & Palmer, Limited, the three largest match manufacturing firms in the world.

Making Fuse Plugs

Repeater Six Fuse Plug Company of Canada, Limited, in Operation at Burlington

A new industry that started operations at Burlington, Ontario, in February is the Repeater Six Fuse Plug Company of Canada, Limited. They have taken over the second storey of the Bluebird Transit Company's garage where they have about 2,500 square feet of floor space. They have installed two stamp machines, a rotary machine, a rivetting machine, three electric soldering irons and two testing machines, and are now turning out from three to five thousand plugs a day. Their daily capacity is ten thousand plugs.

The company's product is a patent repeating six fuse plug known as the Repeater Six which has been approved by the Hydro-Electric Power Commission of Ontario. They are at present employing from eight to twelve girls and two men in the plant and have nine travellers on the road. They expect shortly to increase their sales force to fifteen.

The capital of the company is $60,000. Directors are:—Hughes Cleaver, president; W. C. Campbell, vice-president and manager; E. Shapland, secretary-treasurer; G. Alton, F. Martlin and W. Harshaw.

RECENT INDUSTRIAL DEVELOPMENTS ILLUSTRATED



A New Plant in Northern Ontario

The photograph above is a winter view of the new forty-ton groundwood pulp mill erected by the Temiskaming Pulp and Paper Company, Ltd., near Haileybury, Ont. The building is 270x60 feet, of concrete and brick construction. Alex. Fasken, K.C., Toronto, is president of the company.

New Oshawa Industry

W. E. Phillips, Limited, Acquire Plant of Thornton Rubber Company

The factory building of the Thornton Rubber Company, Limited, Oshawa, Ontario, which was gutted by fire during February has been secured by a new industry, W. E. Phillips, Limited, who will commence rebuilding the plant and installing machinery with a view to having it in running condition by the beginning of May.

The new company will manufacture woodwork, mouldings, mirrors, picture frames, etc., and will have an initial staff of about fifty men. They will ultimately employ from one hundred and fifty to two hundred as soon as business conditions warrant expansion.

The head of the new industry is Col. W. E. Phillips, D.S.O., M.C., Kingston, Ontario. R. S. McLaughlin, president of General Motors of Canada, Limited, will, it is understood, be one of the directors.

New Edmonton Industry

Renton Oil Specialties, Limited, Will Manufacture Lubricants Oil Bricks, etc.

The Renton Oil Specialties, Limited, are a recent addition to Edmonton's list of manufacturing industries. They were incorporated during February with an authorized capital of $20.000, and are now operating a small plant. They expect to have a payroll of 50 people, mainly women, before the close of the present year.

Some of the products which the company will manufacture are:—auto polish, carbon remover, anti-freeze compound, valve grinding compound, solid oil bricks, and mineral oil made soluble in water. The list also includes inks of all kinds and various lubricants greases and cleansers.

Arthur C. Renton, founder of the Renton Oil Company of Newcastle-onTyne and James Renton, who for some years prior to the war was analyst and chemist for the same concern, are respectively managing director and secretary-treasurer of the new industry. Mr. Renton is attempting to solve the problem of oil extraction from the Fort McMurray tar sands, and lubricants which he has made from the oil will be shown at the forthcoming Edmonton Industrial Exhibition.

The company also intend to manufacture a soil fumigant that will destroy all soil pests but will at the same time be a fertilizer and absolutely harmless to plants and animals.

The president of Renton Oil Specialties, Limited, is J. J. Duggan, of the J. J. Duggan Company, Limited, who are financial agents for the new industry.

Are Rebuilding Plant

National Stove Manufacturing Company Will Resume Operations about Middle of April

A large fire in Montreal on February 8th, destroyed the premises of the National Stove Manufacturing Company, causing damage to the building estimated at about $100,000 and to the stock of about $40,000. The company are now rebuilding their plant and expect to be able to proceed with their business as usual about the middle of April. They are now in temporary premises at 1038 E. Ste. Catherine St. East.

Writing to INDUSTRIAL CANADA on March 13th, the company state:—"We are quite optimistic as to the future, and although this fire has been a heavy loss for our firm, we hope to get a very satisfactory season."

New Electric Company

Nesbitt Electric Manufacturing Company, Limited, to Manufacture Krantz Products in Toronto

The Nesbitt Electric Manufacturing Company, Limited, were recently incorporated to manufacture and sell in Canada the Krantz electric products under a license agreement with the Westinghouse Electric & Manufacturing Company, East Pittsburg, Pennsylvania. The new company will supersede the Canadian Krantz Electric and Manufacturing Company, Limited. They are starting on a small scale at 95 King Street East, Toronto, and expect to grow considerably as business improves. The principal products are switchboards, panel boards, switches and motor starters.

Manufacturing Space To Let

We have about 100,000 feet of manufacturing floor space to dispose of on lease

Situated Within the Limits of Montreal

AND ALL ON ONE FLOOR

Building is splendidly lighted; insurance rates are lowest of any in Canada; excellent shipping facilities; railway siding adjoining the building. Can be had for long or short period of years.

APPLY

CARON BROTHERS

233 BLEURY STREET - - - MONTREAL, P.Q.

BANFIELD

Sheet Metal Articles and Turned Parts

Made Specially to Order

We place at your disposal a factory containing over 100,000 sq. feet of floor space and over 40 years of experience in Drawing, Stamping, Punching, Blanking, Forming, Welding, Enamelling, Jappaning, Plating.

We work all sheet metals such as Aluminum, Brass, Copper, Steel, Tin Plate and Sheet Zinc. There is at your service a wide range of equipment and it will pay you to let us figure on your requirements.

W. H. BANFIELD & SONS, LIMITED

370-386 Pape Avenue - ESTABLISHED 1878 - TORONTO

T H-E



Factory Hazards

Dangers that are apparent have no terrors. Hazards become "safe" when a flood of clear light falls upon them.

Naturally your employees work in greater safety and their production increases and becomes better.

CONSULT HYDRO ENGINEERS
ABOUT PROPER FACTORY
LIGHTING METHODS.

TORONTO HYDRO-ELECTRIC SYSTEM

226-228 YONGE ST., TORONTO



For Full Information Write for Catalogue

THE MATHEWS GRAVITY CARRIER COMPANY, LTD.

PORT HOPE, ONT.

To Commence Manufacturing

Canadian Pneumatic Automobile Accessories, Limited, a new Montreal Company

The Canadian Pneumatic Automobile Accessories Limited, Montreal, will commence manufacturing their products when the sale of stock has been completed. They have not as yet decided where they will manufacture, and it may be that they will not actually manufacture themselves, but will have the different parts contracted for.

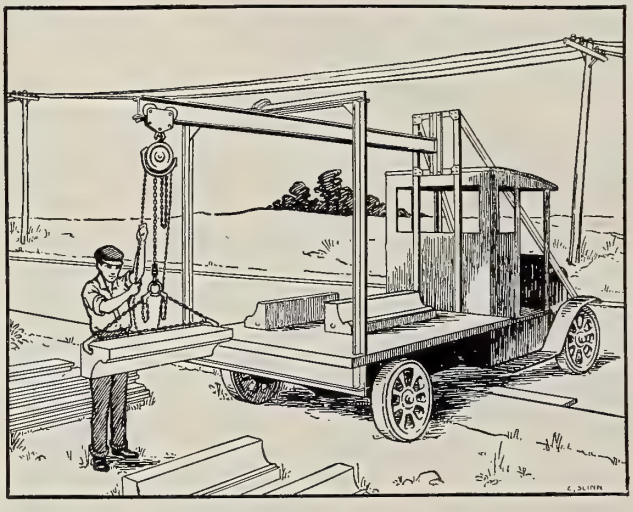
This company hold the patent rights in Canada for their products, which are: An attractively designed tank, made in three sizes, each compact and light in weight, mechanically and chemically designed to make synthetic air. This tank or generator, is used in connection with an appliance which fits on to the valve stem of the inner tube for tire inflation. The tire fitting can be set to any pressure required, and when this pressure is reached, no more air is allowed in. Not only is the generator designed for private use, but a special pressure gauge has also been prepared for the use of garages and filling stations, where free air is supplied to motorists. The generator can also be attached to a patented auto jack, and it is only necessary to place the jack under the axle, turn the cock and the car is jacked up to the desired height.

There is also an attachment, an oiler and greaser, designed to permit the motorist to place oil or grease in the most inaccessible parts of the car without the danger of coming in contact with the oily parts of the car. The tank supplies the air to force oil or grease to the exact spot desired.

Another accessory this company will turn out is a fire extinguisher. This extinguisher may be used as desired, and when desired, without recharging until such time as all the contents have been used. It will throw the extinguishing stream a distance of at least 25 feet. From samples shown, it is seen that all articles are well made, compact and simple of construction.

THE HERBERT MORRIS CRANE & HOIST COMPANY, LIMITED

NIAGARA FALLS, ONT.



FOR THE PROTECTION OF YOUR PRODUCT OR YOUR PURCHASES

DO NOT BE SATISFIED WITH HOISTS OR CRANES OF ANY LOWER QUALITY THAN THOSE BEARING THE NAME "MORRIS"

New Biscuit Company

Kanadda Biscuit Company of Canada, Limited, to Build Plant in Hamilton

A new industry for Hamilton, Ontario, is the Kanadda Biscuit Company of Canada, Limited, who propose to erect a plant there about the beginning of July for the manufacture of biscuits similar to the English types. The plant will be built according to English specifications and equipped with English machinery. English expert bakers have also been engaged so that the product may be as nearly as possible equal to the imported article.

The company's architect is now in England gathering information and looking over machinery, plans, etc.

The Kanadda Biscuit Company have an authorized capital of $1,000,000 and are incorporated under the Dominion Companies Act. Directors are:—Frank Ullman, Toronto, president; H. O. E. Braden, Hamilton, vice-president; M. S. Fothergill, Hamilton, secretary-treasurer; F. C. Harp, Brantford; R. E. Stroud, Tillsonburg, and George Nash, Hamilton, directors.

Investigating New Sites

Canadian Brill Company, Limited, Contemplating Extension of Manufacturing Facilities

In a recent interview, Samuel M. Curwen, president of the Canadian Brill Company, Limited, Preston, Ontario, and the J. G. Brill Company, Philadelphia, parent of the Canadian concern, expressed himself as highly pleased with the progress of the new venture.

"We organized our Canadian company last August," said Mr. Curwen, "taking over the Preston Car and Coach Company. That plant has been busy to capacity since that time, with satisfactory results, and the prospects for continued business are excellent, several good prospective orders being in view at the present time.

"As a result of our experience in Canada it is our present intention to remain there permanently, and officers of the company are now investigating several sites in Toronto and elsewhere in Ontario, which would be suitable for new and larger car shops."

JOHN V. GRAY CONSTRUCTION CO.
LIMITED
General Contractors for Buildings

Contracts Successfully Completed or under Construction for the Following;--

Swift Canadian Co. Ltd.	Toronto	Windsor Separate School Board	Windsor
Union Stock Yards Ltd.	Toronto	Corporation of City of Windsor	Windsor
Imperial Oil Co. Ltd.	Toronto	E. N. Bartlett	Windsor
Dunlop Tire & Rubber Co. Ltd.	Toronto	R. H. & J. Dowler	Windsor
Can. Fairbanks Morse Ltd.	Toronto	Champion Spark Plug Co.	Windsor
The Cowan Co. Ltd.	Toronto	Healey, Page & Cappus	Windsor
Howell Warehouses Ltd.	Toronto	Walkerville Land & Bldg. Co.	Walkerville
Albert Kerr Co. Ltd.	Toronto	Sandwich Sep. School Board	Sandwich
Can. Pacific Railway Co.	Toronto	Canada Cycle & Motor Co. Ltd.	Weston
Dominion Bank	Toronto	Horn Bros. Woollen Co.	Lindsay
Imperial Bank	Toronto	Clark Co. Limited	Harrow
Blatchford Calf Meal Co.	Toronto		

EFFICIENT · ECONOMICAL · SERVICE · JOHN V. GRAY CONSTRUCTION CO. LIMITED · TORONTO · J.V.G

We Solicit "Special" and "High-Class" Work

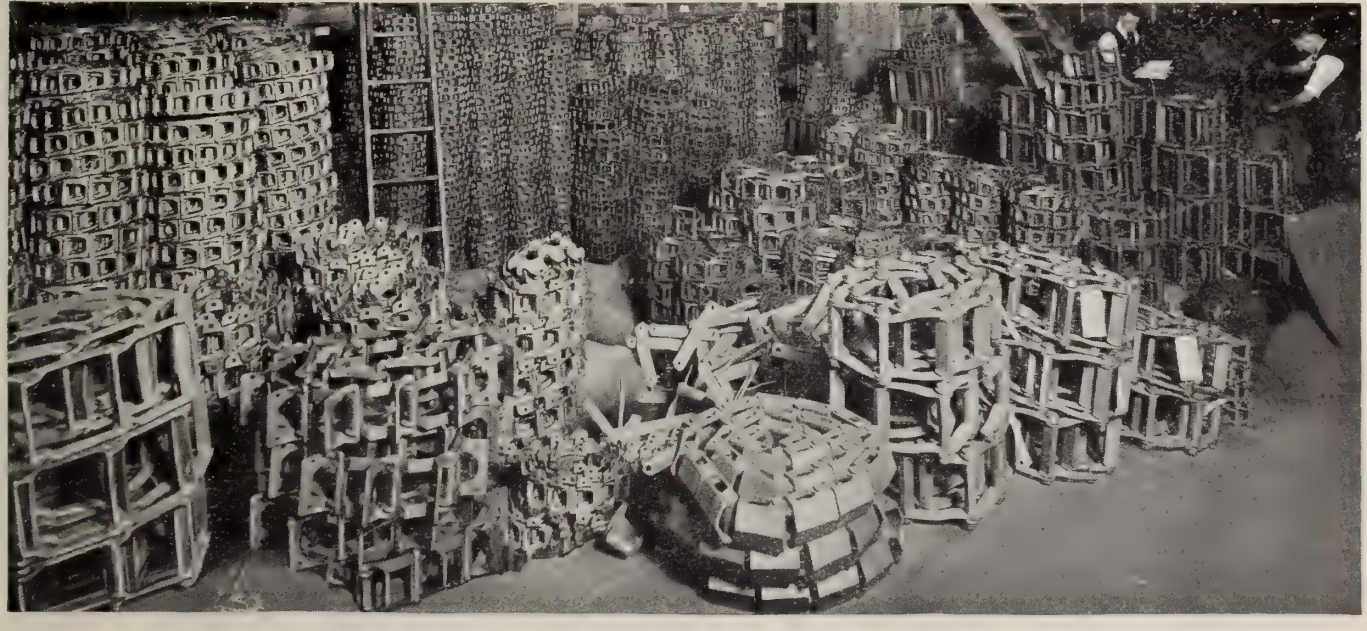
Windsor Office
Bartlett Building

Telephone 4151

Head Office, Toronto
Bank of Nova Scotia Chambers
541 Queen St. East
Telephone M 102

LINK-BELT CHAINS FOR ELEVATING, CONVEYING AND POWER TRANSMITTING

The wide variety of Link-Belt Chains, their high quality standard, and the service we maintain by carrying large stocks at our plant and distributing points, are reasons why you should standardise on Link-Belt Chains. Send for revised Price-List Catalog No. 334.



744 **CANADIAN LINK-BELT COMPANY, LIMITED**

Toronto, Wellington and Peter Streets **Montreal, 10 St. Michael's Lane**

Make New Furnace

Product of Reed & Turnbull, Edmonton, Designed to Use Western Coal

Reed & Turnbull of Edmonton, Alberta, have perfected a new hot air furnace particularly adapted for burning western coal. The new heating device, which has been named the "Eskimo," is an all steel furnace with a grate area 50 per cent. larger than other furnaces of the same capacity. No cement is used in its construction so that the escape of dust or gas is eliminated. The furnace is being made in sizes designed for large buildings and also in a smaller size for houses.

To Make Flooring

Trenton Hardwood Flooring, Limited, Are Incorporated and Will Build Plant

Trenton Hardwood Flooring, Limited, are a company recently incorporated with an authorized capital of $49,000, who intend to instal a plant for the manufacture of hardwood flooring at Trenton, Ontario. They are at present awaiting the passage of a by-law by the rate-payers of the town, granting them a free site and fixed assessment, before going ahead with their building programme.

The plans of the company include a plant with a capacity of 15,000 feet of flooring a day, with the necessary dry kilns, storage, etc., for this volume of business. They also intend to install a transit mill for planing and matching lumber. They expect to be in operation in June and will employ about fifteen men.

The officers of the company are:—W. A. Fraser, president; R. A. R. Allen, secretary-treasurer and J. B. Morgan, director.

New Windsor Industry

Canadian Aluminum and Brass Company, Limited, Will soon be in Operation

The Canadian Aluminum and Brass Company, Limited, have recently been incorporated with a capital of $250,000 and are installing equipment in a plant in Windsor, Ontario, where they will manufacture automobile and other aluminum and brass castings for various applications. They have a modern plant with a main factory 200 x100 feet, and will shortly be in full production.

J. P. Carritte, president of the company, is one of the pioneers in the aluminum industry developing the McAdamite alloys, and for several years past has been director in charge of the aluminum department of the General Aluminum and Brass Manufacturing Company, Detroit, Michigan. The other officers are: Hiram H. Walker, vice-president, E. M. McLean, secretary-treasurer, and J. P. Carritte, jr., assistant manager.

Old Plant Re-Opened

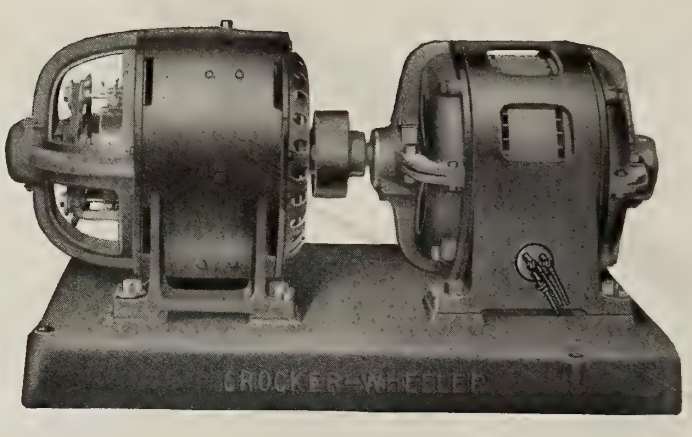
After Being Closed for 26 years Milton Iron Foundry Resumes Operations

After being closed for 26 years the Milton Iron Foundry, Yarmouth, Nova Scotia, was re-opened on March 1st, and the first cast made. The business was started many years ago by Pitcher and Whittier who manufactured stoves. Later it was acquired by Wilson Clarke & Company and incorporated in 1871. They were succeeded by Frank H. Wilson & Company who for some years were very successful with the stoves they turned out. Following financial difficulties the business was sold to the late A. A. Saunders and was finally closed down.

The new business is being started on the site of the original Pitcher and Whittier Foundry and has every prospect of success. Orders from all over the province have been received and it is expected that the plant will soon be running to capacity, producing castings and parts as well as finished products.

The Firestone Tire and Rubber Co., of Canada, Limited, report that they are now completing their new plant at Hamilton, which has been in course of construction for some time, and hope to be manufacturing on or about May 1st. In the meantime they are getting their machinery installed and ready for operation. They are very optimistic as to the future regarding progress and prospects of the tire business in Canada.

There is big economy in a modern Motor Generator set



Canadian Crocker-Wheeler Motor Generator set. Motor: 30 H.P. 550 volts, 3 phase, 60 cycles 1200 R.P.M. Generator: 20 K. W. 110 volts, Compound Wound, Interpole Type

We can certainly point out money saving factors in this modern, Canadian Crocker-Wheeler motor generator set.

Motor has our own special cast welded Rotor construction.

Generator is of the interpole or commutating pole type, which ensures operation from no load to a heavy overload without sparking, or need of shifting the brushes.

THE CANADIAN CROCKER-WHEELER COMPANY LIMITED

HEAD OFFICE AND WORKS: ST. CATHARINES ONT. MANUFACTURERS AND ELECTRICAL ENGINEERS DISTRICT OFFICES: TORONTO & MONTREAL

ALSO ALL BRANCHES OF *Northern Electric Company* LIMITED Montreal Halifax Ottawa Toronto London Winnipeg Regina Calgary Vancouver



PRODUCTION

A recent item in the American Machinist states, "One riveter using a LITTLE DAVID RIVETING HAMMER 11 months old, assisted by a helper and one rivet heater maintained an average of 1544 rivets per eight hour day for a month, or 3.2 rivets per minute for every minute they worked on steel car construction."

STAMINA

A ship yard executive states, "They are the best hammers we ever used and I can recommend them to anyone. I shall always insist on LITTLE DAVIDS in the future."

UPKEEP

15.6 cents per tool per month for over 1200 LITTLE DAVIDS is the record of one of the largest users of pneumatic tools in the world.

These are not reports of special tools but regular stock models ready to make similar records for you.

Bulletin 8611 describing these tools in detail will be sent on request.

Canadian Ingersoll-Rand Company
Limited

Sydney Sherbrooke Montreal Toronto
Cobalt Winnipeg Nelson Vancouver

Ingersoll-Rand

MAPLELEAF

Motor Trucks

Not the Money Involved, But the Soundness of the Investment

Is the first consideration of any business man in expending any funds. The soundness of the "Mapleleaf" as a truck investment is its chief recommendation.

We would like to prove it to you.

Mapleleaf Manufacturing Co., Limited
Head Office and Factory;
MONTREAL, - CANADA



The Modern Steel Shelf

STEEL Shelving is rapidly replacing wooden shelving as it is strong, compact, neat and attractive, and because more shelving space can be had in the same amount of room, with the elimination of the fire hazard. The shelves can be easily adjusted to meet changing conditions, and it can be increased as the business grows. Steel Shelving is not nailed to the building and it remains the buyer's property.

MEADOWS'
STEEL SHELVING

can be adjusted every 3 inches in height. Dividers may be inserted to form cubby holes of various widths; doors can be added to form cupboards; fronts can be attached to form bins, almost any design or combination can be had. A stock of the standard units is carried in our warehouse so that additional equipment can be quickly obtained.

If you wish to improve the efficiency of your stock or salesroom, install Meadows' Steel Shelving. It will pay big dividends in permanent satisfaction.

GEO. B. MEADOWS LIMITED
479 Wellington St., West—Toronto, Canada.

Contemplating Expansion

Stanfield's, Limited, Truro, Nova Scotia, May Enlarge Their Woollen Plant

Stanfield's Limited, manufacturers of woollen underwear at Truro, Nova Scotia, are contemplating the enlargement of their plant, though at the present time no particulars can be given regarding the date on which the building programme will be carried out. Providing building conditions will permit the economical erection of the proposed extensions, the directors have authorized the construction of a new wool washing plant about 160x72 feet; an additional storey to their knitting mill, 175x111 feet; and a fireproof storehouse, 4 storeys high, 150x100 feet.

The approximate cost of the buildings is estimated at $125,000, and there will of course be more machinery installed at a cost not as yet estimated. With these increased facilities the company will be able to augment their production from 25 to 100 per cent, according to trade requirements. Tenders have not yet been called for, so some changes may be made in the plans.

Making Paper Barrels

Excelsior and Woodwool Company, Limited, Secure Toronto Rights for New Product

The Excelsior and Woodwool Company, Limited, Toronto, have secured the manufacturing rights for Toronto and surrounding district of circular paper shipping containers, such as the Canadian Paper Box Company, Limited, started to turn out in Montreal some time ago. Writing to INDUSTRIAL CANADA on March 8th, the Excelsior and Woodwool Company stated that they were practically ready to start the manufacture of their new product and expected to be in a position to fill orders by March 15th.

The company have installed machinery for the manufacture of paper barrels, kegs, tubs and pails. Among the advantages claimed for the new barrels are economy, lightness, safety, and the fact that they can be made to exact size for each individual user.

The Granite Concrete Block Company, Limited, Weston Road, Toronto, have made an addition to their office buildings, using their own product in its construction.

Rous & Mann, Limited, printers, Toronto, have bought the lot at the back of their building facing on St. Patrick Street. The new property is 60 x 100 feet deep and will give, with the present building a total depth of 220 feet with light on three sides. As soon as some of the present leases expire they expect to enlarge their present premises, so as to take in the extra property.

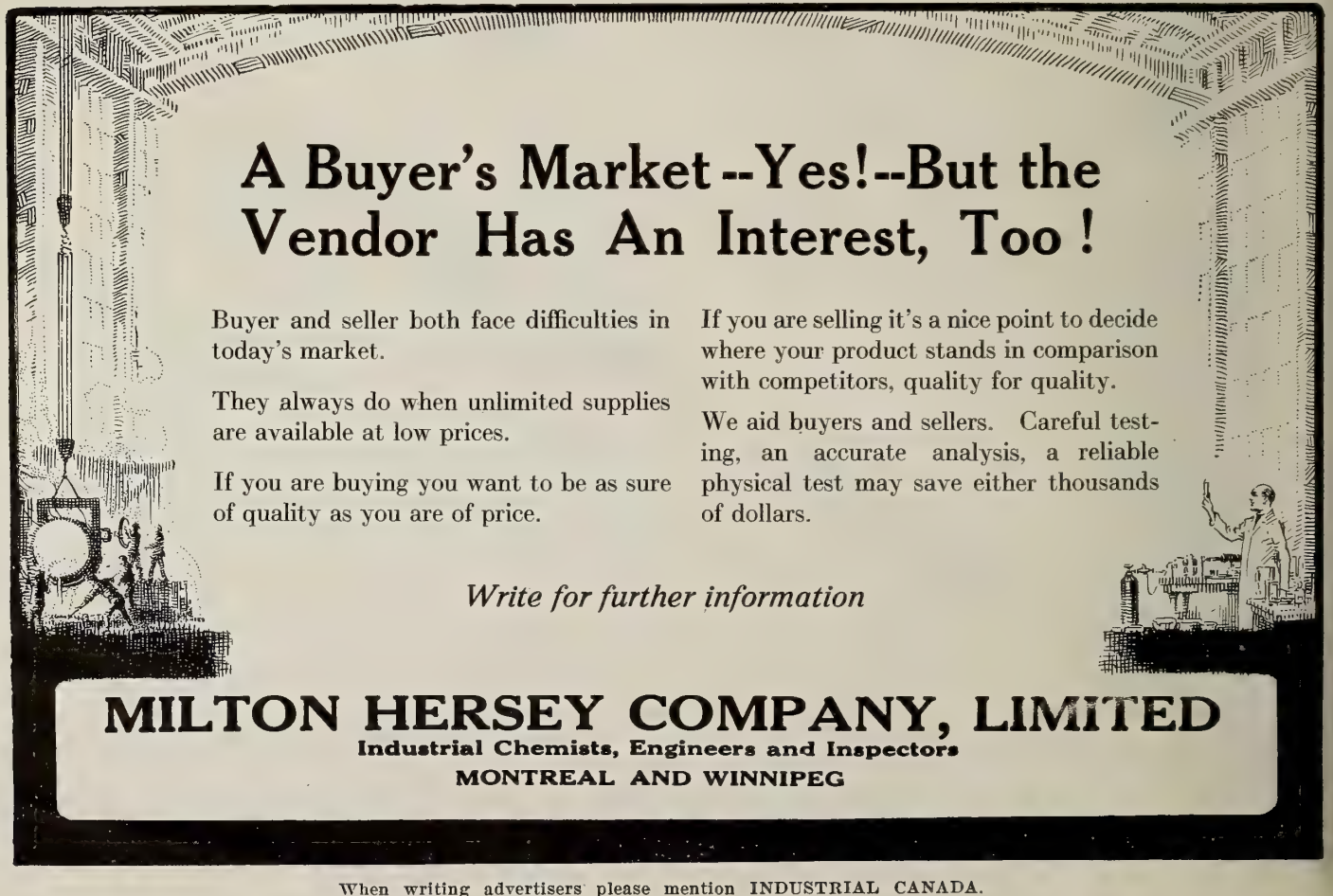
New machines are being installed at the plant of the Greenfield Tap and Die Corporation of Canada, Limited, Galt, Ontario, to manufacture their line of pipe tools which hitherto have been imported from the parent plant in the United States. The company with start with pipe wrenches and vices, adding the other items as fast as possible.

New Bulletins Issued

A number of new bulletins have been issued by the Canadian Steel Foundries, Limited, and the Canadian Car and Foundry Company, Limited, Montreal. These illustrate and describe, among other products, the A. R. A. standard "D" couplers, several types of freight and passenger cars, the Vulcan trucks, and the new street cars and trailers built for the Toronto Transportation Commission.

Correction of Advertisement

In the Sully Brass Foundry's advertisement in the March issue the letter "C" was dropped from the heading. This should read: "Brass, Bronze and Aluminum Castings."



BRASS, BRONZE AND ALUMINUM CASTINGS

BY

MODERN MOULDING METHODS **CUT CASTING COSTS**

Our Method—Your Cost

Quantity production work a specialty.

Jobbing work taken care of promptly.

Send us your patterns for trial order.

All castings **Sand Blast Finish.**

We stock Bronze Bushing Materials, all sizes—Cored and Solid. List sent on request.

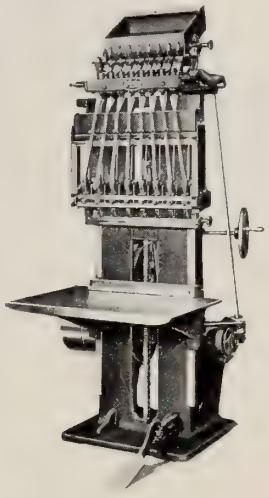
SULLY BRASS FOUNDRY Ltd.

Brock Ave. and Bloor St. W.
TORONTO

YATES

NAILING MACHINES

Built Strong for heavy continuous Service



OPEN AND CLOSED BACK TYPES

Yates

BUILT IN DIFFERENT SIZES

P. B. Yates Machine Co. Ltd.

Hamilton, Canada



COLD DRAWN, TURNED AND POLISHED STEEL

SHAFTING

ROUNDS, SQUARES, HEXAGONS AND FLATS

$\frac{1}{8}$ in. to 6 in. Dia. $\frac{1}{4}$ in. to $2\frac{1}{4}$ in. $\frac{1}{4}$ in. to $2\frac{1}{4}$ in. up to $1\frac{1}{2}$ in. x 3 in.

FREE CUTTING SCREW STOCK **PISTON AND PUMP RODS** **FINISHED KEYS**

The CANADIAN DRAWN STEEL CO., Limited

HAMILTON, ONTARIO

HIGHWAY AND RAILWAY BRIDGES

Structural Steel and Steel Plate Work



Buildings Tanks Towers

MacKINNON STEEL CO. LIMITED, Sherbrooke, Que.

Montreal Office: 404 New Birks Building

Industrial Statistics

Principal Figures from Preliminary Reports Issued by Dominion Bureau of Statistics

Advance reports on Canadian industry during the calendar year 1920, issued by the Dominion Bureau of Statistics, cover the automobile, lumbering, meat, broom and brush, and starch and glucose industries. Below are given the principal figures from the reports.—

THE AUTOMOBILE INDUSTRY

	Manufacturing	Supplies	Repairs	Total
Establishments, number	17	62	2,503	2,582
Capital	$ 53 906,506	$ 15,332,887	$ 19,943,913	$ 89,183,306
Salaried Employees, number	1,089	338	340	1,767
Salaries Paid	$ 2,642,427	$ 1,022 847	$ 444,351	$ 4,109,625
Wage Earners, No.	7,192	2,764	4 688	14,644
Wages Paid	$ 10,688,657	$ 3,747,149	$ 4,932,203	$ 19,368,009
Materials, cost	$ 67,157,945	$ 10,603,632	$ 6 671,767	$ 84,432,444
Products, value	$101 465,846	$ 19,361,882	$ 16,592,623	$137.420.351

THE LUMBERING INDUSTRY

Number of plants	4,406
Logging	925
Sawmill	3,481
Value of production	$311.815,293
Capital invested	$234,793,646
Salaries and wages	$ 84,469,412
Number of employees	78,244
Materials used	$103 077.980
Miscellaneous expenses	$ 67,146,294
Value of fuel, Canadian	$ 1,441,968
Value of fuel, foreign	$ 147.995
Value of imports	$ 20,003.252
Value of exports	$107.634,554

THE BRUSH AND BROOM INDUSTRY

Establishments, number	78
Production, value	$ 4.680,985
Capital invested	$ 3 780 252
Employees, male, number	1,000
Employees, female, number	371
Salaries and wages	$ 1.212,541
Fuel, Canadian, value	$ 23,025
Fuel, foreign, value	$ 9,587
Power used, h. p.	1.725
Miscellaneous expenses	$ 683,549
Cost of materials	$ 2.454.001
Imports, raw materials, value	$ 1,612,757
Imports, manufactured products, value	$ 1,201,677
Value of exports	$ 620,917

THE STARCH AND GLUCOSE INDUSTRY

Establishments, number	5
Production, value	$ 8,379,185
Capital invested	$ 6,112,124
Employees, male, number	768
Employees, female, number	116
Salaries and wages	$ 1,062,104
Power used, h. p.	3,126
Fuel, Canadian, value	$ 794
Fuel, foreign, value	$ 446,617
Miscellaneous expenses	$ 745,506
Cost of materials	$ 5,936,610
Imports, value	$ 833,564
Exports, value	$ 12,234

THE MEAT INDUSTRY

Establishments, number	86
Production, value	$240,544,618
Capital invested	$ 84,288,306
Employees, male, number	10,837
Employees, female, number	1.141
Salaries and wages	$ 16,691,471
Cost of materials	$170,916,888
Fuel, Canadian, value	$ 373,440
Fuel, foreign, value	$ 900,004
Power used, h. p.	35.145
Miscellaneous expenses	$ 15,781,380
Value of imports	$ 10,718,203
Value of exports	$ 50.738,485

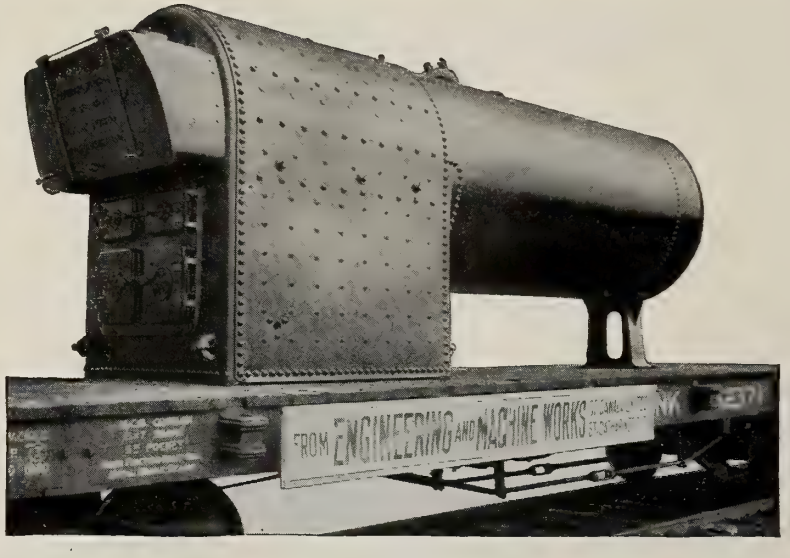
New Motor Car

General Motors of Canada, Limited, Making the Oakland Car at Oshawa

A new Canadian motor car being placed on the market this spring is the Oakland, manufactured by General Motors of Canada, Limited, in a new unit of their plant at Oshawa, Ontario. The car is designed to meet the demand for a well-built six cylinder car around the $1,600 price. The company have already a large number of orders on file for export shipping, so that they are assured, from the very outset, of a quantity production which will make a low price possible.

The car has graceful body lines of a new design. The radiator is high, giving the car a massive appearance. The motor is the six cylinder overhead valve type and has proven itself to be efficient and economical in consumption of gasoline.

Sensible, Economical Heating



The Keystone Fire Box Heating Boiler offers you unusual economy and efficiency for the heating of your plant — or for that church, school or other public building you are interested in.

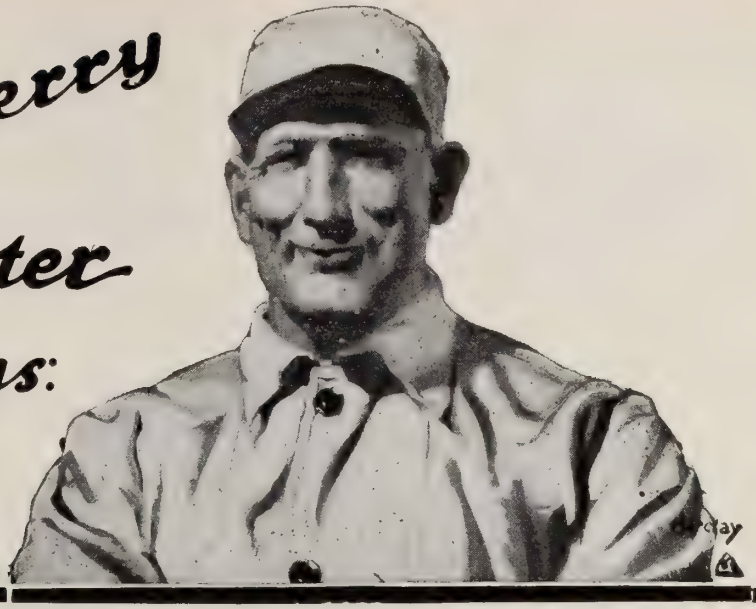
Built in various styles and several sizes, with smoke consuming device when required. Let us send you particulars. We know we can interest you.

Engineering and Machine Works of Canada, Limited

ST. CATHARINES, ONTARIO

Eastern Sales Offices:—HALL MACHINERY CO., SHERBROOKE, QUE., AND BIRKS BLDG., MONTREAL

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For the Best Automobile Finish Use Our New

Pale Body Finishing Varnish

---An old time varnish made to fit modern shop conditions.

---Flows out perfectly and dries so quickly, you can ship the car the next day.

---Gives beautiful high lustre, and has the quality and materials that guarantee service.

Let us Demonstrate this new Member of the Berry Line

It is making new business for us, and can do the same for you

Walkerville **BERRY BROTHERS INC** Ontario

Worlds Largest Makers
Varnishes and Paint Specialties

INDUSTRIAL REPRESENTATIVE

WILLIAM HOME, 34 VICTORIA STREET, TORONTO

Deaths Among Prominent Manufacturers

Senator John Milne

Head of Burrow Stewart & Milne and a Founder of the Steel Company of Canada

Senator John Milne, head of the Burrow, Stewart & Milne Company, stove founders and scale makers, Hamilton, Ontario, died at his home on March 4th in his eighty-five year. He had been ill since last October.

The late Senator Milne was born in Aberdeen, Scotland, in 1838 and came to Canada in 1854. He started an iron foundry with Charles Stewart and William Burrow and later the firm became Burrow, Stewart & Milne. Both his partners died several years ago.

Senator Milne was also one of the founders of the Steel Company of Canada, Limited, and was associated with numerous other business enterprises in Hamilton. He was a lifelong Conservative and for twenty-five years was president of the Hamilton Conservative Association. He was for many years a member of the Library Board and was largely instrumental in securing the Carnegie grant for the Hamilton library.

George Wedlake

President and General Manager of Cockshutt Plow Company and Mayor of Brantford

Manufacturers throughout Canada will regret the loss to Canadian industry by the death on March 3rd, of George Wedlake, president and general manager of the Cockshutt Plow Company, Limited, and Mayor of Brantford. Mr. Wedlake was born in Brantford in 1856, and after attending the public schools there, learned the trade of moulder with A. Harris, Son & Company. He went to the Cockshutt Plow Company when that organization had a staff of only twenty men, and remained with them throughout the rest of his career, advancing to foreman, superintendent, assistant to the manager, general manager and finally, when H. Cockshutt was appointed Lieutenant-Governor of Ontario, he became president of the company.

Mr. Wedlake was always prominently associated with movements for civic improvement and philanthropy. His salary as mayor and much of his private income was generously turned over for relief work. He was a staunch supporter of the Y.M.C.A. and all forms of church work and gave much encouragement to local sports.

For eight years previous to 1921 the late manufacturer was a member of the Brantford Hydro-Electric Commission. He served on the school board and the board of health and was serving his second term as mayor at the time of his death.

James Watt

President of Lyman Brothers & Company, Manufacturing Druggists, Toronto

James Watt, president of Lyman Brothers & Company, manufacturing and wholesale druggists, died in Toronto on March 6th. He was born in Edinburgh, Scotland, sixty-seven years ago and came to Toronto while still a child. At the age of fifteen he entered the service of Lyman Brothers & Company and gained rapid promotion. For twenty-five years he was secretary-treasurer of the firm and last year became president.

Gordon M. McGregor

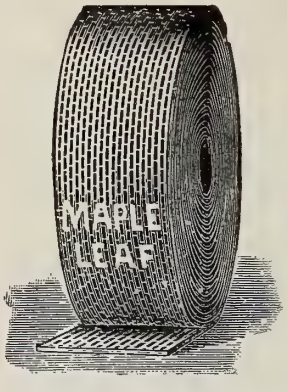
General Manager of the Ford Motor Company of Canada, Limited

Gordon Morton McGregor, general manager of the Ford Motor Company of Canada, Limited, died in the Royal Victoria Hospital, Montreal, on March 11th, following an operation performed a few days previously. He had received internal injuries in a railway accident over a year before and a recurrence of the trouble that was caused at that time rendered the operation necessary.

Mr. McGregor was born in Windsor, Ontario, in 1873, and received his education there and in Winnipeg. From 1904

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HAMILTON, :: CANADA



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"Maple Leaf" Brand

Stitched Cotton Duck Belting

STRONG DURABLE ECONOMICAL TRUE RUNNING

Being thoroughly waterproof it is equally good for running in wet or dry places. As a main drive, "MAPLE LEAF" cannot be excelled, and for conveyors it is in great demand. :: A trial belt will convince you.

Write for Samples and Prices

"MAPLE LEAF" BELT DRESSING

The Best for All Kinds of Belts

Quebec Branch: 51 Duluth Building, Montreal

REGAL BOND

MADE IN CANADA

OUR WATERMARK IS OUR GUARANTEE

Truly a Prince among papers of its class with its

Beautiful Whiteness
Well-Knit Fibre
Smooth and Even Finish

Just what you require for record work that must stand frequent handling and yet remain crisp and fresh

ENVELOPES TO MATCH

Barber-Ellis Limited

71 Wellington Street West

ENVELOPE MANUFACTURERS AND PAPER DEALERS

Toronto Brantford Winnipeg Calgary Vancouver

to the time of his death he had occupied the positions of vice-president, treasurer and general manager of the Ford Motor Company of Canada. He was a director of the Ideal Fence and Spring Company, Windsor; director of the Children's Aid Society; director of the Windsor Petroleum and Refining Company; president of the Automotive Industries of Canada, Toronto; and chairman of the Essex Border Utilities Commission.

Harold A. Wilson

President of Harold A. Wilson Company, Limited, Sporting Goods Manufacturers

The death of Harold A. Wilson, president of the Harold A. Wilson Company, Limited, Toronto, occurred suddenly at Saranac Lake, New York, on March 15th. Mr. Wilson had been in poor health for the past two years, during which time he had been under treatment at Saranac Lake.

The late manufacturer was born in Sarnia, Ontario, fifty-five years ago and began his business career with the P. C. Allan Company, Toronto, which he managed and subsequently purchased. The company to which he gave his name has become one of the largest sporting goods houses in Canada.

Edward Caldwell Elkin

President of Maritime Nail Company and Director of Other Industrial Firms

The death of Captain Edward Caldwell Elkin at St. John, New Brunswick, on March 16th, removed one who for more than fifty years had been identified with the industrial and shipping interests of that city. He was president of the Maritime Nail Company and a director of many other corporations. He was a member of the shipping firms of Elkin and Hatfield and R. C. Elkin, Limited, up to a few years ago when he retired from active shipping business.

The late Captain Elkin was born in 1848 at Cumberland Bay. When a young man he came to St. John and became connected with the shipping interests of the port. For many years he had been registrar there of the American Bureau of Shipping and at one time was one of the port wardens. He was always alive to the needs of the port and was instrumental in having many aids to navigation placed in the Bay of Fundy. He also established the West Indian Service from St. John.

Warren Ogilvie

Founder and President of the Eastern Hat and Cap Company, Truro, Nova Scotia

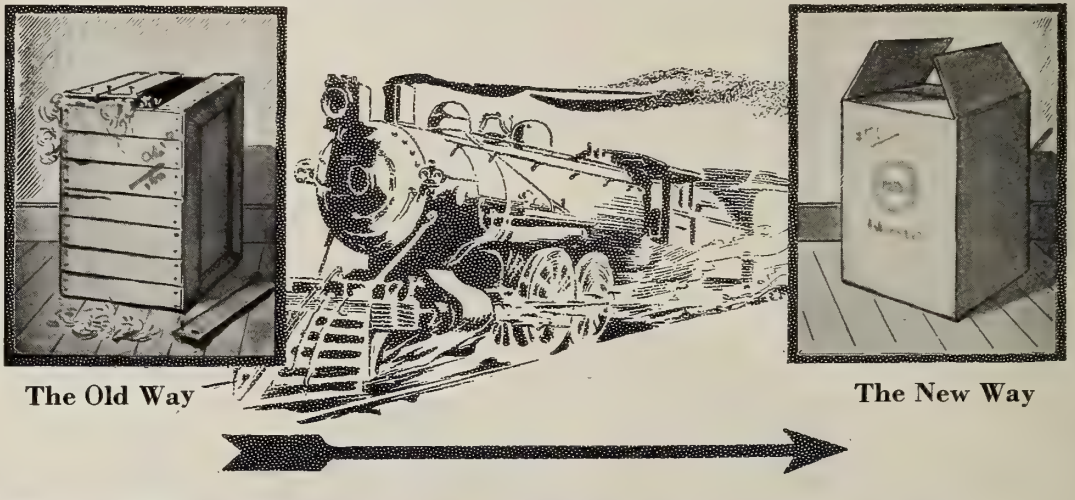
The death of Warren Ogilvie, president of the Eastern Hat & Cap Company, Truro, Nova Scotia, occurred suddenly in Montreal on March 15th. He had been a citizen of Truro since his youth when he started his business career with the dry goods firm of William Cummings and Sons. About twenty years ago he founded the Eastern Hat & Cap Company and, starting in a modest way, was successful in making it the second largest industry of the town. He was also connected with Eastern Shirts, Limited, of which company his brother, Wilson Ogilvie, is manager.

The Canadian Westinghouse Company, Limited, have issued an advertising booklet, entitled "The New Farm Help." The help referred to is electricity and the book explains how it can be used on the farm with the dual advantage of promoting convenience and cutting down labour costs. There are many illustrations made from actual photographs, showing electrical apparatus in operation on the farm.

The Gurney Foundry Company, Limited, Toronto, have issued a catalogue of their porcelain enamel products. These include advertising signs, ranges, table tops, refrigerator linings, trays, etc.

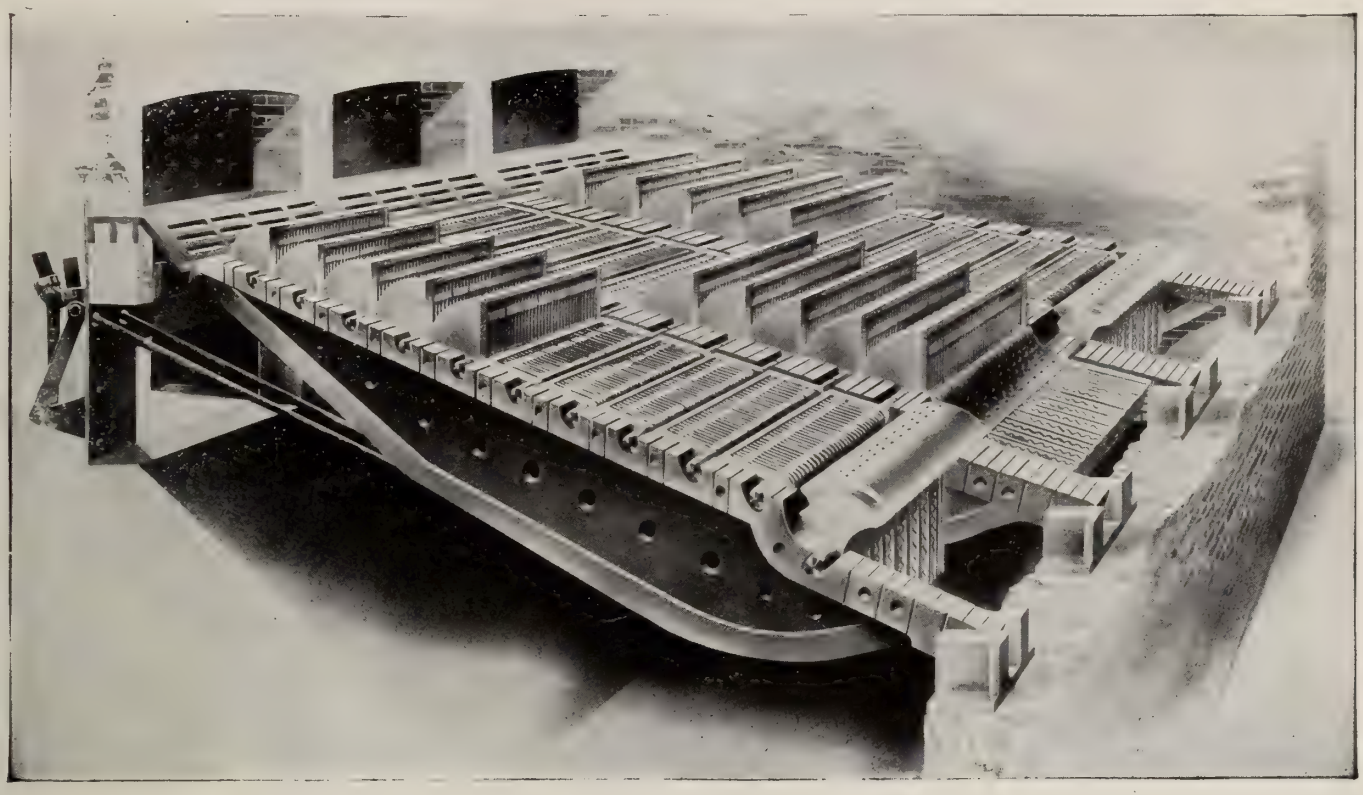
Camille Laurendeau, B. Sc. A., Laval, the son of Judge Laurendeau, Montreal, has joined the sales staff of the MacKinnon Steel Company, Limited, with offices at 404 New Birks Building, Montreal.

H. & D. Corrugated and Solid Fibre Board



CONTAINERS will save on your transportation charges, save your floor space, cut down packing expenses. and give you positive protection against loss from damage and pilfering. Write for prices and samples.

The Hinde & Dauch Paper Co. of Canada, Limited
TORONTO, CANADA



150% to 200% Boiler Ratings with Files Hand Stokers

Maximum ratings are being easily and economically obtained with Files Stokers—not for one day or two days, but continuously. Here are but a few reasons why many power plants, using Files Stokers, are constantly enjoying the lowest operating expenses, the greatest steam pressures and have "jacked" their boiler capacity as high as 200%—safely and inexpensively.

1—Files Stokers insure complete and smokeless combustion.

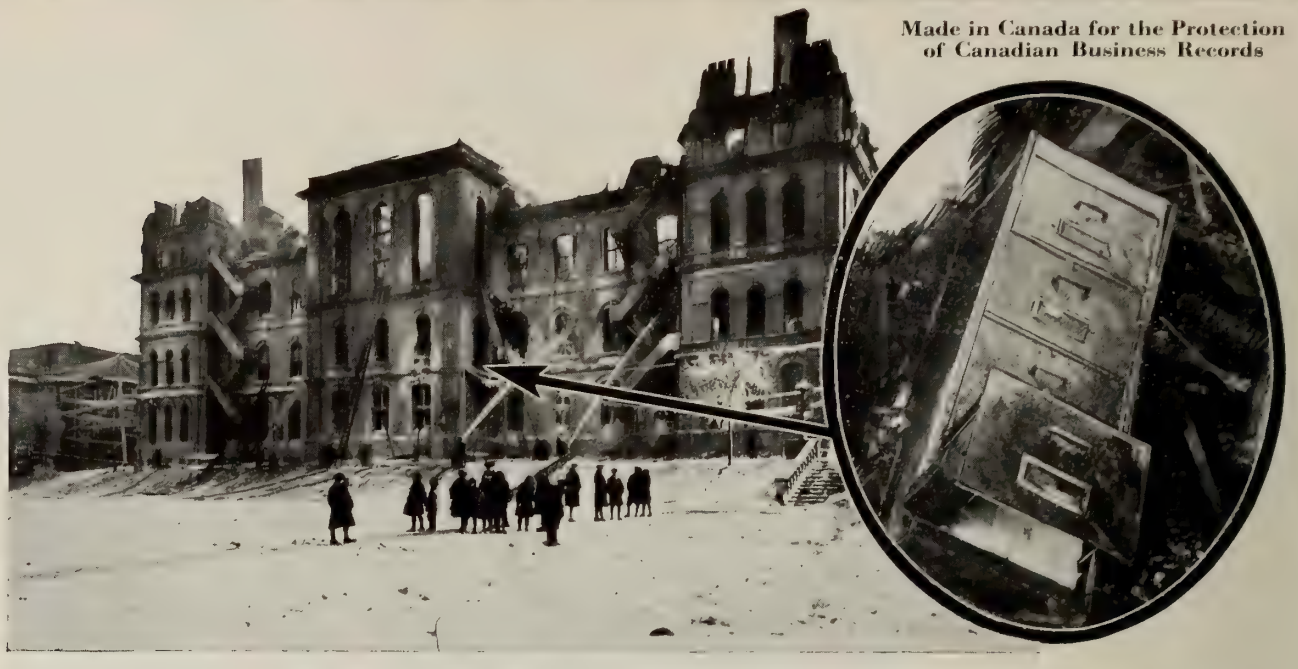
2—They maintain at all times the correct depth of fuel—clean and live fires.

3—Air is constantly circulated and evenly distributed to all parts of the fire.

4—All cleaning operations are constantly performed behind closed doors; there is no excessive inrush of cold air and resultant decrease in pressure at any time.

The Waterous Engine Works Company, Ltd.

Brantford, Ontario



Made in Canada for the Protection of Canadian Business Records

Priceless Civic Records Saved in Big Montreal City Hall Fire!

Through seething flame and withering heat—surviving the tremendous shock of a two-storey impact onto broken debris—through a drenching deluge of water—"Office Specialty" "FIRE-WALL" Steel Filing Cabinets brought the priceless civic records of the City of Montreal through to Safety.

On March 6th the first "Office Specialty" "FIRE-WALL" Filing Cabinet of the Civil Service Department was opened and carefully inspected. Here was a gruelling test of "FIRE-WALL" Steel-plus-Asbestos construction. The Automatic Safety Latch on the cabinet kept the drawers tightly shut in the face of a terrific impact. All the municipal records inside the cabinet were found to be preserved in perfect condition—free from damage by the terrific heat or the deluge of water.

Are your vital records guarded against an untimely visit by our common foe—fire? The time to fortify against its evil consequences is now. "FIRE-WALL" Filing Cabinets with the Steel-plus-Asbestos construction are not an expense. They are an investment in greater Safety for your records.

Let us make a survey of your requirements for better protection. Write or 'phone our nearest store and a representative will call.

Fire strikes when you least expect it. It may destroy the work of a lifetime in a night. It's in your interests to act today.

The "FIRE-WALL" Filing Cabinet illustrated above is only one of 300 similar "Office Specialty" Cabinets which withstood the terrific onslaught of fire and water in the Montreal City Hall fire — and brought their valuable contents through to safety.

"Office Specialty"

PRODUCTS INCLUDE

Dry Insulated Record Safes

Certified by the Underwriters' "B" Label

"FIRE-WALL" Record Safes

"FIRE-WALL" Filing Cabinets

More than 3,000 items comprise the "Office Specialty" line of filing systems and office equipment.

THE OFFICE SPECIALTY MFG. CO., Limited

Filing Systems, Office Equipment and System Service

Home office NEWMARKET Canada

Filing Equipment Stores at:

Toronto Montreal Ottawa Quebec Halifax Hamilton
Winnipeg Regina Edmonton Calgary Vancouver

OFFICE SPECIALTY

LABOR SAVING OFFICE DEVICES — TIME IS MONEY

FILING SYSTEMS *and* OFFICE EQUIPMENT

OFFICE AND FINANCE

Collecting Marine Insurance Losses

By Basil C. Walker

PROMPT collection of claims on marine insurance companies is often a matter very largely in the hands of the assurred. This statement is made with a full knowledge of the scepticism with which it will be received by many who have had experience in the collection of marine losses from the underwriters, but it is made by one, who as foreign credit manager and ocean traffic director for the assured, and later as a marine average adjuster for the underwriter, has an intimate knowledge of both sides of the game.

The following discussion will apply particularly to the settlement of claims for partial losses or damage to cargo, as claims of this nature form probably over 90% of all those with which the average manufacturer or merchant has occasion to deal.

The accompanying article by Mr. Walker appeared originally in the January issue of the World's Markets, being published practically simultaneously with an article on the subject of "Marine Insurance" by Mr. Tucker of Dale & Co., Toronto, which we published in the January issue of Industrial Canada. Mr. Walker suggested the desirability of reprinting his article in Industrial Canada, as a useful supplement to what Mr. Tucker had written, and we have followed his advice. While prepared for the information of manufacturers and other shippers in the United States, its contents are equally applicable to Canada.

—The Editor.

The work of collecting claims on the marine insurance companies is very frequently assigned to the credit manager, generally on the theory that, as it is an item to be collected, he is the proper man and the best equipped man in the organization to handle it. Many credit men are acquainted with at least the general procedure involved in the handling of such claims, but a great many more do not seem to be. This apparent ignorance should not be a matter to cause either great surprise or any particular reproach. The marine insurance business is a very old, very highly specialized one. Indeed in certain aspects it can be well dignified by the appellation of profession. A credit man, especially if he has anything to do with foreign trade, should have much the same knowledge of marine insurance that he has of another profession, the law. Probably few credit men are lawyers, but it is even more certain that every credit man worthy of the name deems a general knowledge of the law to be a very essential part of his equipment.

Similarly, while there is no need for a credit man to have a thorough knowledge of the whole intricate marine insurance business, he should be conversant with the general theory and more common practices of that business. Of all the different phases of marine insurance, none is of more immediate interest to him than that involving the prompt settlement of such claims as he may have occasion to file against the marine underwriters.

The most common difficulty with which the loss departments of marine insurance companies are confronted is the filing of claims without proper documents to establish the loss or permit of its correct adjustment. The following papers are absolutely essential for the underwriter to give proper consideration to a claim:

1. Particulars of insurance, showing that the underwriter to whom the claim is submitted has insured the shipment on which the loss has occurred.

2. A *proof* of loss, which must be quite independent of any statement of the assured or consignee or claimant.

3. A steamship bill of lading, preferably an original.

4. A copy of the shipper's commercial invoice. This invoice must cover all merchandise referred to in the particulars of insurance as being the subject of the insurance in question, *quite aside from the fact that only a small part of the merchandise may be damaged and be the subject of the claim.* In lieu of a complete invoice the underwriters will often accept an invoice relating to the part claimed for, provided that supplementary information is furnished them showing just what part of the total insurance the assured intended to apply to the part on which he bases his claim.

5. An account sales, where the damaged goods have been disposed of at a public or private sale, in order to determine the amount of the damage.

6. Any other papers, such as packing lists, consular invoices, post-office receipts, affidavits as to actual contents of packages at time of shipment (the two last mentioned being especially necessary in the case of claims for theft and pilferage from parcel post packages) or any other documents which will help throw light on any point involved in the settlement of the loss. In supplying these additional papers there is no fixed rule to follow. The assured must use his own judgment, but a knowledge of the reasonable requirements of the adjuster, who must arrange the settlement of the loss, aided by his own common sense, will be a sufficiently good guide for all practical purposes. Indeed it may be well to emphasize that, although many requirements of marine insurance companies before settling claims appear unreasonable or arbitrary, they are really based on sound business sense. A proper study of the underwriter's position and an appreciation of his problems will show this to be true.

The necessity for the particulars of insurance is so obvious that most claimants furnish them without actually realizing that they are doing so. It would be so patently absurd to present a claim to an insurance company without presenting evidence that that particular company has insured the shipment that practically every claimant attempts to furnish the necessary evidence of insurance. The failure to supply sufficient data on this point usually arises through carelessness or oversight. Very little is required—it being necessary only that the underwriter know the amount of the insurance, the date it was effected, the merchandise covered, the voyage insured and the vessel's name. Where the policy has been insured under an open policy, it is also advisable to give the policy number. In those cases where the claim is being presented to a firm of underwriters acting as agents or managers for a number of different companies, it is almost essential to specify with which of the companies represented the insurance was effected. This is especially necessary where the assured has two or more policies with companies represented by the same agents or managers. Failure to supply this information will often cause considerable delay in the settlement of the claim, as the underwriter is unable to find in his records the details of the insurance and the terms under which it was effected. In some cases it may result in the claim being rejected, as the insurance company, not having complete data on the risk, will identify it as being apparently covered by one policy of the assured which does not cover the risk on which the claim is based. As a matter of fact the insurance may have been actually effected under another policy, possibly with the same company, which fully covers the risk in question. Of course rejections of this sort can always be remedied by re-filing the claim with full details regarding the insurance, but in the meantime a lot of time has been lost and all parties to the transaction more or less annoyed.

If a certificate of insurance has been issued, great care must be taken by the claimant to obtain this document and file it with his claim, not only because it furnishes the most complete statement of the particulars of insurance obtainable, but also because of its

Bank of Montreal

Established over 100 Years

Capital Paid up - -	**$22,000,000**
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Undivided Profits -	**$1,501,646**
Total Assets - -	**$517,403,162**

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UNITED STATES: New York, Chicago, Spokane, San Francisco —British American Bank (Owned and controlled by the Bank of Montreal)

WEST INDIES, BRITISH GUIANA and WEST AFRICA—The Colonial Bank (in which an interest is owned by the Bank of Montreal)

Accounts Receivable

are often more difficult to collect promptly than drafts drawn on and presented to your customers.

Our facilities for handling collections, through our 526 branches and numerous correspondents in all parts of the world, are second to none. 676

The Canadian Bank of Commerce

Capital Paid up $15,000,000
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legal standing as a negotiable instrument. A perusal of the certificate of insurance shows it to be a negotiable instrument, usually (but not necessarily) payable to the order of the assured. It must therefore be endorsed in the same way as any other negotiable instrument before it will be possible for the insurance company to make payment to any party other than the payee specified on the face of the certificate. This rule is so definite that (no matter how clear a claim may be otherwise) it is impossible for the loss to be paid to the original assured if he has made the certificate payable in the first instance to some third party, such as his customer, and has failed to have the certificate endorsed by that third party before being presented for payment. It is also to be noted that most certificates have to be countersigned by some person or firm specified on their face before they are valid. Where this is required a certificate is valueless until it has been so executed by the required counter-signature.

The usual form of certificate will be found to have printed across its face some such phrase as:

"Original and duplicate issued, one of which being accomplished the other to stand void."

Certificates in Triplicate

Similarly provision may be made for the issuance of the certificate in triplicate. The meaning of this phrase is of course obvious and the intent is the same as that which leads to the insertion on foreign bills of exchange of the wording, "At sight of this First of Exchange (Second Hand) etc.," namely to enable two or more complete sets of shipping documents to be sent forward to the foreign destination by different mails, any one set to have the same force and validity as each of the other sets or of all three together. In the event, however, of only one set being received and being used to obtain delivery of the goods, payment of the draft or payment of the insurance claim, it is provided that such delivery or payment automatically renders void the remaining outstanding copies.

From this it will be seen that a claimant can only be required to submit one copy of the certificate of insurance, properly executed and endorsed in order to obtain payment of a claim. If he presents this, with the other papers necessary to establish his claim, the claim must be honored and payment cannot be refused for non-production of the other copies of the certificate. However, as the other copies are equally useful for collecting a loss, the insurance company will always be exposed to the possibility of the other certificate being presented with an apparently bona fide set of papers to some one of its agents and the loss being again paid by such agent without referring to the home office. For this reason the underwriters always like to obtain all copies of the certificate of insurance when paying a loss, although they have not the legal right to insist on the production of all copies as a condition precedent to payment. It will be seen that their desire in this connection is very reasonable and as the other copies of the certificate are valueless to an honest assured after the loss has been paid, it is desirable for the assured to turn over all copies obtainable without demur.

Non-return of Certificates

There remains the all too frequent instance where the foreign consignee neglects to return the insurance certificate with the other paper in support of his claim. In cases of this sort or in others where no copies whatsoever of the certificate are submitted the underwriters may refuse absolutely to pay the claim, until such time as the certificates are produced. This difficulty can be surmounted, as a rule, by giving the underwriters a guarantee to hold them harmless in the event of their later being obliged to pay a claim to somebody else who presents the missing certificates. A similar method can be followed in the case of improper endorsement or execution of the certificates. If the value of the certificate be small and the assured a firm of good standing their own guarantee will usually be acceptable. In other cases a bank or surety company guarantee may be required. It is necessary to observe that, while most underwriters are willing to accept these guarantees, they do so only as an accommodation and can if they so wish, stand fast on their technical right to have all papers in proper order surrendered to them.

(Concluded in May Issue)

A Satisfactory Report

Howard Smith Paper Mills, Limited, Earnings Lower but Strong Position Shown

In view of the general business depression which has reduced the earnings of nearly all companies during the past year, the third annual report of the Howard Smith Paper Mills, Limited, for the year ended December 31st, 1921, may be regarded as satisfactory.

Earnings of $611,793 compare with $1,087,380 for the record year of 1920. By the addition of $1,519 from sundry revenues and investments this is increased to $613,312. Deduction of bond interest at $141,681 and dividends on preferred stock of $120,000 leaves a balance of $351,631 applicable to common, before provision for income tax, depreciation or reserves. The distribution of $297,932 on the common shares leaves a balance not distributed of $71,699. Figured on the basis assumed in the foregoing, the company earned 8.76 on common.

The balance sheet shows total assets at $9,840,455, as compared with $9,856,106 the previous year. Inventories have been brought as near as possible to a replacement basis. Inventories of stock on hand at mills are shown at $1,226,744 as compared with $951,349 the previous year. Accounts receivable are down to $431,746 from $1,124,675 at the end of 1920.

Earnings Are Lower

Montreal Cotton Company, Limited, Earnings for 1921 are $428,127

Earnings of the Montreal Cotton Company, Limited, for 1921 are shown in their annual report as $428,127 as compared with $617,251 for 1920. These earnings after providing $210,000 for preferred dividends on Montreal Cottons, Limited, are equivalent to 7.3 per cent. on the common stock as compared with 13.5 per cent. in 1920.

At the annual meeting held on February 22nd, S. H. Ewing retired from the presidency, continuing as a director. Sir Charles Gordon, formerly vice-president, was elected president and Sir Herbert Holt succeeded to the vice-presidency. The board of directors was re-elected.

Canadian Salt Company

Earnings Well Maintained during Past Year in Spite of Adverse Conditions

The Canadian Salt Company, Limited, in their annual statement for the year ended December 31st, 1921, report gross profits amounting to $228,040.15 which compare with 202,298.52 for 1920. Deductions for bond interest, income tax, depreciation, sinking fund, etc., leave a balance of $97,342.49 as net profit which is only slightly below the 1920 figure of $98,981.42. Dividends at 8 per cent. were paid amounting to $96,000, leaving $1.342.49 to be added to surplus account which now stands at $208,182.70.

Financial results from the year's operations were adversely affected by the marked falling off in demand for chloride of lime due to the closing down or reduced output of mills making sulphite pulp for the bleaching of which chloride of lime is used.

F. N. Burt Company

Slight Contraction in Profits but Strengthening of General Position

A slight contraction in profits during 1921 but a material strengthening of the general position is shown by the financial statement of the F. N. Burt Company, Limited. Profits of $674 754 compare with $842,712 for the previous year. Added to profits is a balance of $872,621 carried forward from the previous year's account. After transferring $216,585 to realty and plant reserve and making other appropriations, including a 10 per cent. additional bonus on common stock amounting to $215,310, the balance for the year stands at $842,682.

The balance sheet shows a reduction of inventories and total assets of $4.721,722 compared with $5,103 296. Accounts payable have been reduced from $559,948 to $158,450. Reserves are increased from $1,723,148 to $1.762,982.

A Message to Canadians

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A DUTY falls on manufacturers to produce articles of a quality and price that will compare favorably with foreign makes, and on our agricultural interests to increase production.

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Through continual operations in the exchange markets of Canada, the United States, Great Britain and world centres, we are able at all times to handle international exchange at closest possible rates.

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Union Bank of Canada

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The recent inauguration of a new "Business and Service Department" in this Bank, perfects the completeness of the banking facilities we have always aimed to render.

Created to provide individual service to each client. the department invites inquiries as to the purpose it can serve in the transaction of your business.

348

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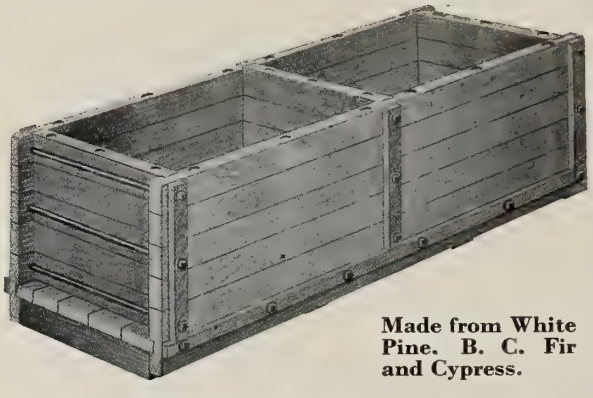
Capital Paid Up $7,000,000 **Reserve Fund $7,500,000**

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National Breweries, Limited

Annual Statement Shows Record Earnings for Year Ended December 31st.

The annual statement of National Breweries, Limited, for the year ended December 31st, shows record earnings of $1,243,220, as compared with $976.609 the previous year and $1,061,350 for the fourteen months ended December 31st, 1919. After meeting all charges and the payment of regular dividends the statement shows a surplus of $417,321 to be carried into profit and loss balance, bringing that account up to $2,035,559.

The balance sheet discloses a working capital position slightly less favourable than that of the previous year. Current assets are shown considerably reduced owing largely to a reduction of nearly $300,000 in inventories. Cash, accounts receivable and investments are also shown at lower figures. On the other hand, among the current liabilities, bank loans are shown at a reduction of $300.000 and accounts payable are also lower.

Bond interest at $87.000 compares with $92,400 for the previous year. After its deduction together with allowance for depreciation of $183.361 and the distribution of $194.250 among the preferred stockholders there is available $778.009 applicable to the common stock, which is equivalent to 34.5 per cent on the $2.254.300 represented by the common shares.

Fraser Companies, Limited

Strong Balance Sheet Presented to Annual Meeting Though Earnings are Lower

A strong balance sheet was presented to shareholders of Fraser Companies, Limited, at their annual meeting at Edmundston on March 15th, although earnings were materially lower. Net profits from the company's operations for the year amounted to $1 001,459. as against $2,157,618 last year. From the net profits were deducted $199,227 for bond interest and $333,873 for other interest, leaving a balance of $468.359, which, added to last year's surplus, left a total at credit of profit of loss of $2,745,141.

From this balance there was appropriated for depreciation an amount of $445,572, for depletion $235,463, annual proportion of discount on securities sold $31,500, and for payment of Dominion Government taxes for previous year $249,462.

In view of the decline in replacement value of logs and manufactured lumber, pulpwood and supplies, the company wrote their inventories down to market value by appropriation of $1.000 000 from profit and loss for this purpose.

After the above deductions there remained at credit of surplus account $783,142.

Profits Are Curtailed

Canadian Wm. A. Rogers, Limited, Show Decreased Business in Annual Statement

The general trade depression is reflected in the annual report of the Canadian Wm. A. Rogers, Limited, by a substantial decline in profits for the year ended December 31. Profits of $83,314 compare with $572,536 a year ago. The balance brought forward from 1920 makes a total of $467,048 and when deductions for reserve and dividends are made the balance stands at $218,470.

The balance sheet reveals a strong liquid position, with merchandise on hand valued at $1,358,538, as compared with $1,614,916; accounts and bills receivable are $518,421, compared with $619,930, and cash on hand, $266,858, as against $190,239. Accounts and bills payable have declined from $607,610 to $534.186. Reserves total $1,147,123, compared with $1.232,573.

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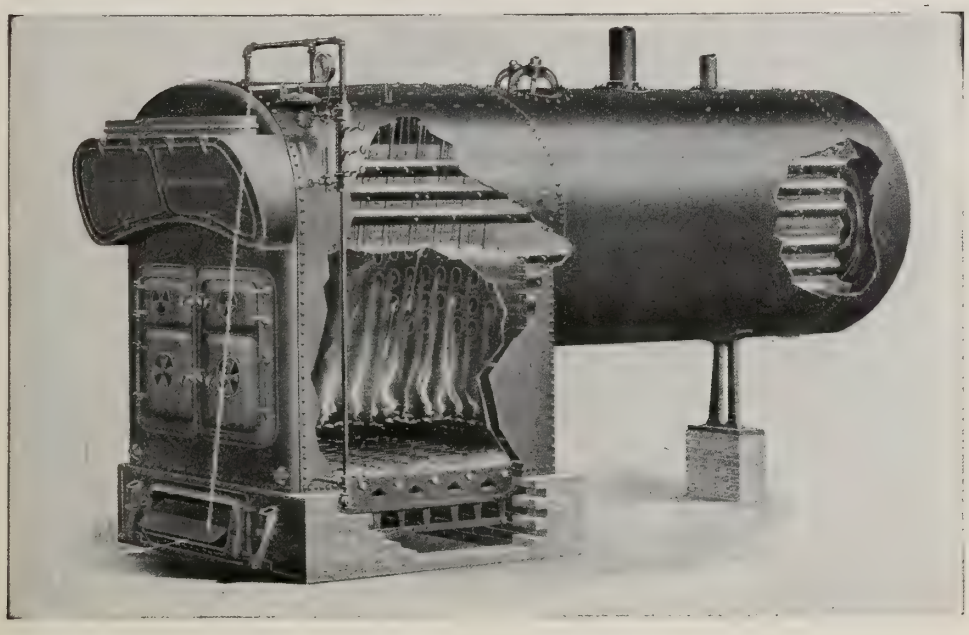
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Net Earnings Lower

Abitibi Power & Paper Company, Limited, Issue Eighth Annual Statement

Net earnings of $4,678,172 reported in the eighth annual statement of the Abitibi Power & Paper Company, Limited, are lower than those of the previous year but are the second largest in the company's history. Surplus has been drawn upon to the extent of over $2,000,000 to provide for depreciation of inventories and for the wiping out of an item of nearly half a million for taxes for the years 1919 and 1920.

Gross earnings for the year were $3,861 810, as compared with $10,580,142 the previous year. Operating expenses of $4,183,637 deducted from this leave the net operating revenue at $4,678,172. as compared with $5,043,133 for the record year of 1920. Deductions of $849,743 for bond interest, $989,762 for depreciation, bad debts, taxes, etc., and $70,000 for preferred dividends leave $2,768,665 applicable to common stock, representing an earning of slightly over $11 a share.

The profit and loss account shows a balance of $3.548.092, as compared with $3,688,571 the previous year.

Satisfactory Results Shown

Port Hope Manufacturing Company, Limited, Report Increased Profits

The annual report of the Port Hope Sanitary Manufacturing Company, Limited, for the year ended January 31st, 1922, shows satisfactory results from the year's operations. Profits have increased over last year, standing at $91,211 as compared with $69,292. With interest received on account of unpaid stock subscriptions there is a balance for distribution amounting to $92,350, as compared with $81,121. After the deduction of $25,917 for depreciation and all other charges, there is a balance of $54,191 to be carried forward.

The balance sheet shows a slight increase in gross assets, which stand at $1,450,926, as compared with $1,436,524. Current assets at $256.144 compare with $250.729 for 1921. Cash on hand and accounts receivable show a very substantial growth, while there has been a corresponding reduction in inventory of raw materials and supplies, the latter item standing at $117,803, as compared with $217,034. Current liabilities have declined from $40.017 to $13,513. Total reserves amount to $115,984, as compared with $136.414, and profit and loss account at $75,928, as compared with $54.592.

Penmans, Limited

Reduced Earnings for Past Year but Strong Financial Condition

Reduced earnings for the year ended December 31st, 1921, left a deficit of $164,511 to be met from the profit and loss account. Sales for the year amounted to $4,789,053 as against $9,499,180 in 1920, the decrease being partly due to greatly reduced values. Profits of $223,855 compare with $460 305 for 1920 and $1,523.033 for the year previous. The previous balance of $1 045.391 has been reduced to $880.881.

The company closed the year in strong financial condition, the liquid capital being $3,142,149 in excess of liabilities. There is no bank indebtedness, whereas $1,300,000 was owing to the bank at the close of the previous year. Inventories have been reduced from $3,158 232 to $1.959.587.

Move to Ottawa

Branch Office of Deloro Smelting & Refining Company Taken from Toronto

The branch office of the Deloro Smelting & Refining Company, Limited, which has been in Toronto since the inception of the enterprise in charge of Thomas Southworth, managing director, has been removed to the Bank of Nova Scotia Building, Wellington St., Ottawa, where are the offices of M. J. O'Brien, Limited. Hon. M. J. O'Brien and J. A. O'Brien are, respectively, president and vice-president of the Deloro Company and the removal of the managing director and branch office from Toronto to Ottawa is for the sake of consolidation and convenience.



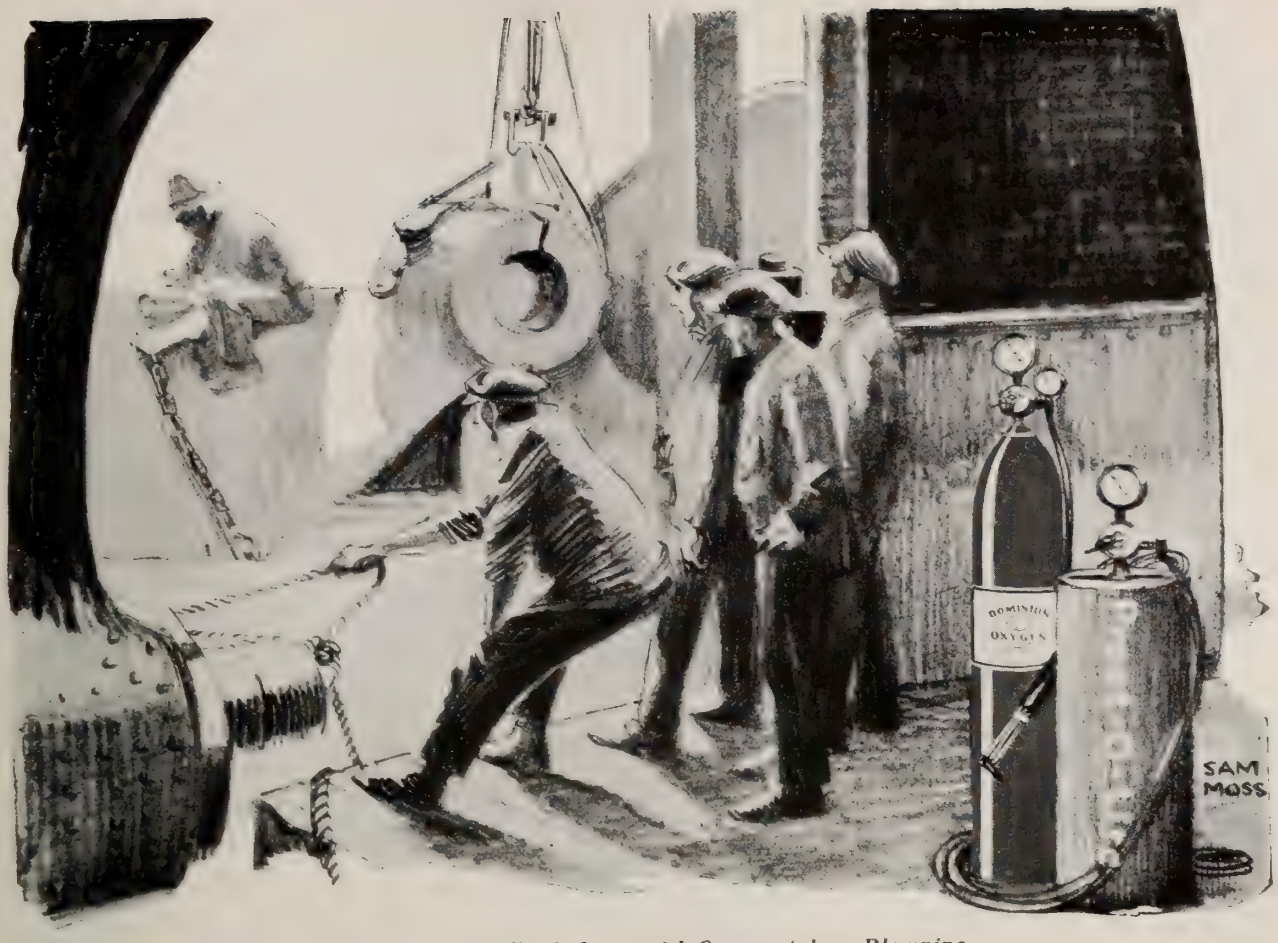
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Good Surplus Shown

Asbestos Corporation of Canada, Limited, Report Satisfactory Year's Operations

The tenth annual report of the Asbestos Corporation of Canada, Limited, while it does not show the large earnings that have been made during the past few years is still quite satisfactory, as, after making all deductions and paying dividends on common and preferred, a surplus of $83,258 remains to be carried forward, making the total surplus $2,136,000.

Profits of $543,258 after making allowance for bond interest, depreciation, taxes, exhaustion of minerals and other charges compare with $1,048,940 during the previous year. This represents an earning of about 7.76 on both common and preferred. The balance of $263,258 left after distribution of $280,000 on preferred represents an earning of approximately 8.77 on common.

The working capital position is shown as materially improved. Net working capital without including reserves for contingencies and taxes is shown as $3,510,168 as compared with $3,398 494 the previous year. Assets of materials on hand stand at $815,413 as against $347,672. Accounts receivable and cash are lower, but accounts payable are also down.

Profits Are Reduced

Sawyer-Massey Company, Limited, Affected by Adverse Business Conditions

The adverse business conditions which prevailed throughout 1921 caused a decline in the profits of the Sawyer-Massey Company, Limited. These stand at $133,027 as compared with $223,815 for expense, $4,205, inventory decline, $63,180, and bad debts, $34,735. 1920. After deductions for bond interest, $24,630, bond flotation expense, $4,205, inventory decline, $63,180, and bad debts, $34,735. there remains $6,275 to be carried to profit and loss account which reduces the debit balance to $342,922. This stood at $352,020 at the close of 1920.

The balance sheet shows a slight reduction in assets from $5,915,316 to $5,828,-345. The current assets show a substantial surplus over current liabilities standing at $2,919,718, as against $2,032,601, or a liquid surplus at $887,116. Fixed assets are valued at $2,324,915, and after depreciation and outstanding bonds there is a total surplus of approximately $2,430,000.

Bank of Hamilton

Annual Statement Shows Only Slight Reduction in Profits for Past Year

The fiftieth annual statement of the Bank of Hamilton which covers the year ended February 28th, 1922, shows the institution to be in a sound position and, in view of the financial depression of the past twelve months, it may be taken as quite satisfactory and encouraging.

The profits of the year showed a reduction of only $37,356.15 totalling $850,672.12, as against $888,018.27 in the previous year, but were $3,567.26 greater than they were two years ago, when they amounted to $847,104.86. There was only a small addition of $890.00 to the reserve fund, this amount having been received as premium on new stock, and the reserve now stands at $4,850,000, as against capital stock paid in of $5,000,000.

The contraction that was to have been expected, in view of business conditions, is noted in most of the items in general statement. Notes in circulation amount to $4.659,386.00, a decrease of $833,990.00. Deposits fell away to $69.910,120.92, a decline of $4,615,450.16 in the twelve months. Holdings of specie and Dominion notes, which amounted to $9,033,891.64, show no great variation. Total quick assets now amount to $28,583,956.97, which is $1,017,236.92 less than at the end of the previous year. Call and short loans in Canada are given at $5,834.533.11, a reduction of $851,912.83. Current loans and discounts in Canada were $45,-928,769.95, a decrease of $4,487,897.25. Loans to cities, towns and municipalities, and school districts, amounting to $4,264,692, were in the previous year, when they totalled $2 807,658, included in the item, "other current loans." Total assets at $79,480,755.31, show a contraction of $5,867,748.19, as compared with the aggregate at the end of the last fiscal period.

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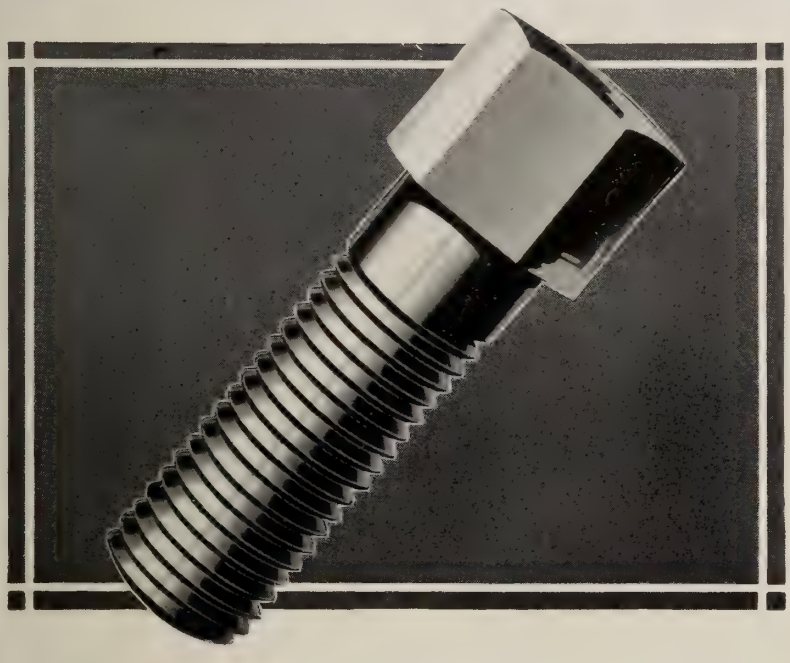
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Book Reviews

Mineral Production

Preliminary Report of the Mineral Production of Canada during the Calendar Year 1921. Ottawa, February 23, 1922, the King's Printer.

This statistical survey of the Canadian mineral industry during the past year reveals a decline in value of production that was foreshadowed by the fall in prices of metals towards the end of 1920. The aggregate value of the economic minerals produced reached a total of $172,327,580, which compares with $237,422,857 for the previous year.

The principal mineral producing province was Ontario, for which province the value of mineral production was $54,505,770. British Columbia came second with a production valued at nearly $35,000,000. Nova Scotia was a close third with $32,500,000. Alberta and Quebec ranked fourth and fifth with $29,000,000 and $14,600,000 respectively. Manitoba, Yukon Territory, New Brunswick and Saskatchewan followed in the order named with productions between one and two million dollars each.

Switzerland and Canada

Swiss-Canadian Relations. Special number of *Le Mercure Suisse.* Geneva, January, 1922.

An attractive piece of typography and a useful summary of the more important factors in the trade relations between Switzerland and Canada is this special number of *Le Mercure Suisse*, which has been published under the patronage of Carl Huebscher, consul-general of Switzerland for Canada. The leading article, entitled: "Two Countries Made to Understand Each Other." sets forth the object of the publication in the following terms:—"Convinced that a service can be rendered to both of these nations by furnishing them with the latest economic facts about each other and by giving them information carefully compiled by highly competent authorities, the *Mercure Suisse* decided to call on collaborators particularly qualified for such work and to publish a special number devoted exclusively to commercial and industrial relations between Canada and Switzerland."

The special number is about equally divided between the two countries and contains articles on the leading industries of each. A large number of the illustrations are Canadian photographs supplied by the Department of Trade and Commerce. Among the contributors are Carl P. Huebscher, consul-general for Switzerland in Canada, Watson Griffin, former superintendent of the Commercial Intelligence Branch, Department of Trade and Commerce, Ed. Bauty, chief editor of the publication and P. Christe, editor of the *Prix Courant*, Montreal.

A number of copies of this review have been placed free of charge at the disposal of persons interested in it and may be obtained on application at the Consulate General of Switzerland, 212 Drummond St., Montreal.

The Trend of Wages in Canada

Wages and Hours of Labour in Canada. September, 1920, and September, 1921. Ottawa: Department of Labour. Isued as Supplement to the *Labour Gazette*, February, 1922.

This is the third of a series of bulletins on wages and hours of labour in Canada and, as explained in the introduction, is intended to bring down to September, 1921, on a more extended basis, information regarding trend of wages and hours of labour which was contained in the two earlier bulletins. The index number of wage rates, calculated from figures covering 21 classes in 13 cities, shows a drop between 1920 and 1921. Taking the 1913 average as the base rate of 100, the 1920 rate was 190.3 and the 1921 rate, 176.5. These figures are borne out by the tables published in the following pages of the bulletin, which give detailed statistics of various trades and occupations. The whole constitutes valuable evidence of the trend of wages and hours of employment up to September last.

Reducing Automobile Insurance Premiums

IN practically every class of insurance the honest, careful man pays high premiums to compensate for the losses of the dishonest, careless man. In no class is this so strongly exemplified as in automobile insurance. If what is known as the "Moral Hazard" could be eliminated, automobile premiums could be halved and the companies would still make a profit.

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Industrial Situation Analysed

Industrial Salvation. By Clinton E. Woods, 1421 Chestnut Street. Philadelphia, U.S.A.

This booklet is a short discussion of the situation which is being faced by industrial concerns in the United States to-day, and an analysis of those factors which make for failure. Mr. Woods gives his solution of the problem first. Briefly stated it is this:—cut out superfluities, reduce inventories, jack up credits and know your costs. Managers must be in a position to know and control everything relating to costs. The writer gives some suggestions from his own experience as to installing a system that will co-ordinate the departments of an industry and get it started on the road to "Industrial Salvation."

Self-Government in Canada

Dominion Home Rule in Practice. By A. Berriedale Keith, D.C.L., D.LITT. Regius Professor of Sanskrit and Comparative Philology at the University of Edinburgh, Toronto: Oxford University Press.

This is one of a group of popular volumes being issued as "guides through current problems and events," under the general title of "The World of Duty" covering wide fields of study in international, political, educational and general subjects.

Professor Keith's book is purely descriptive in character, explaining what self-government actually means in Canada and the other self-governing Dominions, and detailing the laws and customs which regulate the relates of these Dominions with the Motherland. The powers of the United Kingdom in "Foreign Affairs" and "Defence" are described.

The study of popular government in Canada derives peculiar interest from the fact that, while the economic and social conditions of the country are generally similar to those of the United States, the political institutions have been framed upon English models and the political habits, traditions and usages have retained an English character. The learned author has indeed achieved a literary feat in compressing clearly and succinctly within the compass of 63 pages, the fundamental facts of Cabinet Government, the Parliaments, and the Judiciary of the Dominions, the powers of the United Kingdom in regard to these institutions, the subject of Imperial control in foreign affairs and in defence, as well as in constitutional affairs, including constitutional change, judicial appeals, the grant of honorary distinctions, and Imperial Co-operation.

Dealing first with the government of the Dominions, attention is directed to the fact that the national government has powers wider in Canada than in Australia or the United States, and includes disallowing acts of the provincial legislatures, though seldom used. Amendments to the constitution can be made not by the people but only by a statute of the Imperial Parliament of the United Kingdom. This follows from the fact that the Constitution itself is a statute of that Parliament. It is pointed out that civil servants of the Dominion have not yet attained the status of those of the United Kingdom, a view in part accounted for by defective methods of recruitment and by the payment of inadequate salaries.

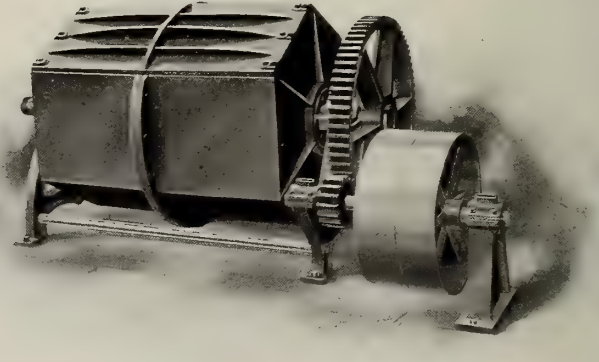
Discussing the "Federations," Dr. Keith recalls that in the case of Canada, the ideal of Sir John Macdonald was to create a real unity, but local feeling proved too strong for this ambition, and the provinces were left with substantial independence. Failure to follow this principle has resulted in a conflict of jurisdiction attended by much litigation, without the issue being yet clear. The powers of taxation of the provinces are limited to direct taxation and the imposing of licenses or fees with a view to raising revenue for provincial, local or municipal purposes, but they can also borrow money on the sole credit of the province. The Dominion, on the other hand, has exclusive power in all matters not expressly assigned to the provinces, including the sole right to legislate regarding military and naval defence. The Dominion possesses an unfettered right to taxation and of raising loans and managing its property. Both the Dominion and the provinces may regulate immigration and agriculture, but the Dominion legislation prevails in the event of conflict. The power to legislate as to education belongs to the provinces. Finally, the Dominion possesses full legislative authority to carry out any obligations imposed by treaty on Canada, including the right for this purpose to invade the sphere of author-



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ity of the provinces, though it is usual to obtain the concurrence of the provinces in the course proposed. The provinces, however, have a right denied to the Dominion, that of free amendment of their constitutions, save as affecting the office of Lieutenant-Governor.

The main spheres in which Imperial control, in some degree, exists are those of foreign affairs, defence and constitutional change. The due observance of this control is largely enforced by the Dominion courts which are subject to the over-riding authority of the Judicial Committee of the Privy Council. The Crown also retains the prerogative of honours.

There remains unsolved the problem of continuous consultation between the Dominions and the United Kingdom in foreign policy.

The importance of the Crown as the symbol of Imperial unity has, it is explained, led to suggestions for the regular appointment of princes of blood royal to the governor-generalships, but Dominion opinion is evidently opposed to any hard and fast rule, preferring that appointments should be made on the grounds of personal fitness for performance of the duties of the office.

Dr. Keith holds that the channel of communication between the Imperial and Dominion governments is of very minor importance. The transfer from the Colonial Office, with its suggestion of Downing Street rule, of all matters affecting the Dominions was proposed at the conference of 1911, but rejected then on the ground that too much work would thus be entailed on the Prime Minister. The War Conference of 1918 asserted the right of the Dominion prime ministers to communicate direct with the Prime Minister of the United Kingdom on all matters which they at their discretion deemed of cabinet importance, an innovation which, unlike the suggestion of 1911, removes the Governor-General as the normal channel of correspondence. In choosing and instructing their representatives, the citizens have all the means they need for giving effect to their will, for the representatives choose the excutive and if the executive and the legislature differ, their differences can be promptly settled in appealing to the people by a dissolution of Parliament.

Dr. Keith's treatise is supplemented by an extensive and well selected bibliography. No better manual could be selected by a student of modern democracies.

A Guide to Correct Spelling

Words We Mis-spell in Business. By Frank H. Vizetelly, Litt. D., L.L.D. New York: Funk & Wagnalls Company, $1.50 net.

Ability to spell correctly is an accomplishment, which no business man should scorn. It is one of the many little considerations which in the aggregate constitute success in any business undertaking. Let any young man attempt to secure employment through the medium of a mis-spelled letter and he will soon realize that faults of orthography will weigh heavily against him. So, too, firms are judged by the character of their correspondence and it may be taken for granted that evidences of illiteracy will militate against the progress of any business organization.

On the assumption that there is a widespread need for a guide book to correct spelling, the publishers of this volume have arranged for its preparation. It has been compiled by the managing editor of the New Standard Dictionary, issued by the same company, whose qualifications for the task are obvious. It contains 10,000 terms, arranged alphabetically, showing the correct forms of each, indicating differences from words of similar pronunciation but different spelling, giving common mistakes made in spelling the various words and also showing proper syllabification.

The book is intended primarily for the use of persons engaged in commercial pursuits. Thus, practically all the words are those commonly employed in business communications. As the compiler explains, they have been collected by him during thirty years of an active life devoted to the production of books. A useful feature is that, not only are words in their correct spelling indexed, but also mis-spelled forms. This is done because a person, who may not know how to spell a word correctly, is more likely to look for it in its incorrect form than in its correct form. Thus, there is little difficulty in getting at the desired information.

Apart from the value of the book, simply as a record of words in their correct and incorrect forms, which is perhaps as far as the average seeker after knowledge will wish to go, a certain amount of space is devoted to lessons on the English language, which will be of value to anyone desiring to have a sound basis on which to build. A series of rules for spelling are given. These if thoroughly

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understood and memorized will be of great assistance. However, the main utility of the volume lies in the facilities it affords for rapid information as to the correct spelling of words, and as such, it might well find a place in every business office.

The British Workman

Full Up and Fed Up! By Whiting Williams. New York, 1921. Charles Scribner's Sons. Price $2.50.

This book, the title of which indicates the industrial situation of England and the British workman's reaction to it as the author found them in 1920, is a record of Mr. Williams' experiences among workmen in the crowded industrial districts of the United Kingdom and his interpretation of the problems he found.

Mr. Williams, in his efforts to discover the workers' attitude, followed the practical method of going among them as one of themselves, taking the same jobs when he could find them or moving among the other unemployed when he could not. The scenes of his adventures and discoveries were laid in the London docks, the Welsh coal mines, where he was at the centre of Bolshevistic feeling, the Clyde, Yorkshire, the Midlands and back in London again. He has a good power of description that makes his book readable and frequently dramatic and, while the book is not brief, it has not been overloaded with the writer's comments. He is content to let his characters speak for themselves and in the main they speak to the point.

In his interpretation, Mr. Williams takes the phrase, "Full up." as the key for understanding British life. It is a crowded country and jobs are scarce.

"For a very long time," he says, "Britain has been the self-acknowledged land of the narrow margin between the number of available jobs and the number of people who need them for their daily bread and butter. It evidently expects to be so for a long time to come. British life—social and political as well as industrial—is largely what it is to-day as the result of this traditional condition, this acknowledgement and this expectation."

The "Fed up!" is explained as the tiredness—and consequent touchiness—of the British citizen in general and the British working man in particular. Practically fixed in one social class from birth unless he emigrates, frequently living and working in depressing, dangerous and unhealthy surroundings, he has been accumulating a spirit of distaste for it all. The war was the crisis that made this spirit an active force.

The remedy as the author sees it is not socialism, but social understanding. Each member of society should have a proper appreciation of the service performed by his fellows and so be able to reward that service justly. The final adjustment cannot be brought about without "an intelligent and sympathetic public opinion." But he seems confident that contentment and peace will come in proprotion as each receives his due of recognition for service performed.

J. L. C.

5,000 *Facts About Canada.* By Frank Yeigh. Toronto, 1922. Canadian Facts Publishing Company.

The 1922 edition of Mr. Yeigh's well-known annual is as informative and useful a hand book as its predecessors. It contains 50 chapters of information on natural resources, manufacturing, cities and towns, financial statistics, etc., etc. In addition the preliminary census data as released by the Dominion Census Bureau up to February 10th, 1922 are included, and a supplement with final figures will appear later.

The Income Tax and the Individual. Toronto, 1922. The Royal Trust Company.

The end of April is associated with the approach of Spring, but also with a less pleasing occurrence—the filing of one's income tax return. By way of mitigating the horrors of this duty, the Royal Trust Company of Toronto have published this useful hand book, which contains in full the Dominion Income Tax Act revised up to January 1st, 1922, and also twelve pages of explanations which are of great assistance in clearing up the more knotty points of detail. A table is also included which shows the amount of tax payable on various amounts of taxable income.



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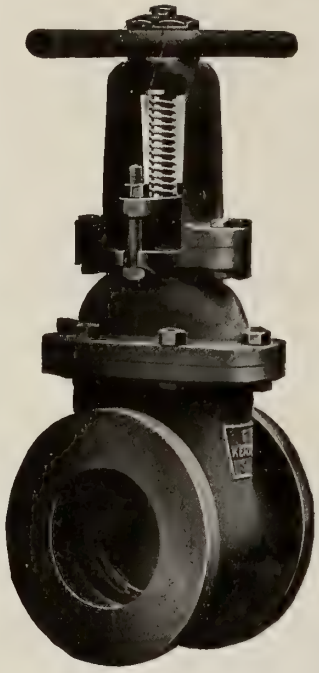
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Recent Trade Enquiries

A list of Enquiries Received from Various Sources including the Canadian Trade Mission, London; the Canadian Trade Commission, Ottawa; the Department of Trade and Commerce, Ottawa; and the Commercial Intelligence Department, C. M. A. Toronto.

DOMESTIC

858. Western Provinces: We have an inquiry from a manufacturers' agent in Edmonton who wishes to represent Eastern manufacturers. His experience has been with boots and shoes, gents furnishings, dry goods and hardware. He furnishes excellent references.

859. British Columbia: A manufacturers' agent in Vancouver would like to get in touch with firms manufacturing household specialties such as brooms, general brush lines and aluminum-ware, with a view to representing them in British Columbia on a commission basis.

859a. A Montreal inventor has ready for exploitation an electrical mechanism for gramophones, and is anxions to get in touch with manufacturers' agents who would be willing to take half share and manufacture or sell the article. The device is a compact, silent motor, co constructed as to fit any make of gramophone, and to operate on A.C. any commercial cycle, A.C. or D.C., 80 to 140 volts, with no change necessary.

FOREIGN

860. Export Salesman: A gentleman who has spent many years selling in foreign countries for various firms, desires to make connections with some firm desiring a representative of that kind. He has travelled on the East Coast of South America, Central America, also the West Indies, South Africa and Egypt. His references are good.

861. England: An old established import and export house in London are anxious to obtain the representation of Canadian houses requiring the services of a London agent. One of their representatives is in this country at the present time

862. Sweden: A firm in Stockholm that has for many years represented British houses desires to get in touch with some Canadian company that might wish to appoint an agent in Sweden. They are principally interested in flour.

863. United Kingdom: A salesman who has had a great deal of experience selling in England, and who was formerly in business as a manufacturers' agent in the City of London, is anxious to represent some Canadian exporter. His experience has been in the following lines: stoves, kitchen cabinets, brushes and table tops.

864. British West Indies: We have an inquiry from a manufacturers' agent in the British West Indies who is in a position to represent Canadian exporters of hardware, paints, oils, drugs and dry goods.

865. British West Indies: A firm in Kingston, Jamaica, would like to hear from Canadian manufacturers of underwear, hosiery, bathing suits, shirts and handkerchiefs, who might desire an agent in that island.

866. Mexico: A well-known firm in Mexico has been recommended to us as being in a position to handle chemicals, paint-making materials, edge tools, leather, glass, and brass tubing. We would be glad to give Canadian manufacturers further information in regard to this firm.

867. Mexico: A gentleman in Montreal, who has a good knowledge of Spanish and is well acquainted with Mexico, is intending to return to that country, and wishes to hear from any Canadian manufacturers who are considering entering that market.

868. Beef and Pork: A Cardiff firm buying tierce beef and barrel pork from Chicago, boiled beef from Australia, and mutton and C.C. beef from South America, would be only too pleased to buy from Canada if meats compete as regards price and quality.

869. Strawberry and Raspberry Pulp: A Liverpool firm asks to be placed in touch with shippers of the above.

870. Canned Goods: An old-established firm of brokers in Bristol, solicit consignments of canned fruits, vegetables, meats and fish, dried fruits, canned salmon and lobster and condensed milk; also c.i.f. quotations for import orders.

871. Canned Goods, etc.: A firm established in Havre as brokers in alimentary products, and claiming large sales, want to get in touch with responsible Canadian exporters of the following products: salmon, lobster, condensed milk (both sweetened and unsweetened), dry apples, etc.

872. Leather: A firm of factors and merchants in Bristol, with travelers covering the whole of the British Isles, desire to hear from Canadian tanners and exporters of sole and dressed leather and leather for dressing. They state they would prefer an agency at first, until acquainted with quality of the goods, when they would probably buy outright.

873. Leather and Sundries: A Northampton firm with branches in Capetown, Brazil, Gibraltar, India, Australia, New Zealand and Holland, inquires for all kinds of upper and sole leather, shanks, machinery, pattern boards and bindings, coverings, weltings, etc., suitable for the aforementioned markets, as well as for the United Kingdom.

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The Canadian Pacific has 25 passenger and freight steamships on the Atlantic Ocean—linking Canada with Britain, France, Belgium, Italy, the West Indies, Cuba, etc. On the Pacific it has 6 steamships linking Canada to the Orient. Four additional Atlantic and two additional Pacific steamships will be added early in 1922.

The Canadian Pacific has also 49 steamships on the coastal and inland waters of Canada.

The Canadian-Australian Line, operating in connection with the Canadian Pacific, has a service from Canada to Honolulu, Fiji, New Zealand and Aus tralia.

Hotel Service

The Canadian Pacific has fourteen magnificent hotels from the Atlantic Ocean to the Pacific—eight, in leading cities or at important railway junctions, open the year round; six, at beautiful holiday resorts (including four in the Canadian Pacific Rockies) open in summer only. Canadian Pacific hotel service is the standard of excellence.

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The Canadian Pacific Telegraph system reaches from Atlantic to Pacific. with its own lines into every important point in Canada and with service to every point in the United States. This is the ideal route for commercial and personal business. Cable connections with Europe and the Orient.

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The Dominion Express Company operates on all rail and steamship lines of the Canadian Pacific and upon other railway and steamship lines. It provides express service — merchandise and financial—of the most efficient standard.

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874. Iron and Steel Products: A firm in Birmingham would be glad to hear from Canadian exporters of bolts and nuts, wire and cut nails, wire and barbed wire, tacks, screws and rivets.

875. Iron and Steel: A Birmingham firm are open for quotations on bright mild steel strip, 16 and 18 W.G. by 4 inches; bright mild steel rods, 11/22 inches long straight length; also pure nickel. They also import iron rod, wire and strip.

876. Hardware: A Manchester firm seeks representation of Canadian manufacturers of any general hardware lines, particularly specialties.

877. Builders' Hardware: A Birmingham firm of importers of builders' hardware, calling on wholesale ironmongers and factors throughout England, desire to act as buying agents for any saleable lines of Canadian hardware.

878. Hardware, etc.: A Bristol firm are open to consider exclusive agencies for any lines suitable for sale to the ironmongery and agricultural implement agent in the United Kingdom.

879. Kitchen and Woodenware: A concern in Birmingham wishes to get in touch with Canadian manufacturers of enamelled ware, aluminum ware, kitchen cabinets, refrigerators, turnery, chair seats, closet seats and general household ware, with view to agency, but also buys on own account.

880. Broom Handles: A Liverpool firm is open for offers of the above in 10 gross lots.

881. Cottons, Woolens, Hosiery, etc.: A Manchester firm, established 25 years, and having first-class references, wishes to represent Canadian manufacturers of cotton, woolens and silks, knitted wear, hosiery, underwear, fabric and skin gloves.

882. Agency or Purchase: Cement, iron and steel bars, billets, etc., wire and cut nails, metals, oils and wire. Any Canadian firm having foregoing products to offer should give particulars delivered c.i.f., any United Kingdom port, to a Welsh firm prepared to consider an agency, or could purchase direct and pay for goods after arrival in port.

883. Automobile Parts and Accessories: A Midland firm are buyers of aluminum and brass sections for motor car body building, viz.: Angles, plates, half round mouldings and doorplates, also aluminum mattresse, automobile accessories and machine-made iron or steel chain 6 s.w.g. to 16 s.w.g. Canadian manufacturers should send catalogues and prices.

884. Lighting Glassware, A firm in Birmingham are interested in glassware for inverted burners for gas, and shades, etc., for electric light, and would be pleased to see catalogues and price lists from Canadian manufacturers, also for any other accessories, such as burners, regulators and magnesia nozzles.

885. Wrought Iron Piping: Galvanized piping, steam and gas, and fittings from ¼ inch to 6 inches are required by firm in Sweden.

886. Galvanized Sheets, A firm in Sweden would like to import galvanized sheets 30 by 72 inches, 24 by 48 inches and 18 by 24 inches; also galvanized hoop iron and bar iron.

887. Steel Products: A Norwegian firm is interested in the importation of mild steel bars, every size, shaftings, (Bulley), up to 4 inches; steel plates, (mild), 1 by 2 metres to 12 ft. by 5 ft.; steel sheets, close and blue enamelled; black steel hoops, steel wire, bright, black enamelled and galvanized enamelled; spring and sledge steel, all regular sizes. They also require carriage axles, 1 inch to 2 inches, and carriage springs, all regular sizes.

888. Internal Combustion Engine: A well-known British firm, manufacturers of an internal combustion engine suitable for working on petrol, paraffin or gas, are looking for a Company with a view to having them manufacture the Engine in Canada.

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CANADIAN COASTER.....C. G. M. M. Ltd.....Ab't Apr. 21

To Nassau (Bahamas), Kingston, Ja., and Belize, British Honduras

CANADIAN FORESTER.....C. G. M. M. Ltd.....Ab't Apr. 19

To St. John's, Newfoundland

SABLE I.....Farquhar Co. Ltd.....Ab't Apr. 7
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CHIGNECTO	R.M.S.P. Co	Ab't Apr. 30	Ab't May 12

To Breman (Germany)

*VEDIC (Cold Stge) *Via Southampton.	White Star Dom. Line	Ab't Apr. 23	

To Liverpool

CANADIAN SEIGNEUR	C.G.M. M. Ltd	Ab't Apr. 8	
*MONTCALM (Cold Stge)	Can. Pac. S. S. Ltd	Ab't Apr. 8	
CANADIAN COMMANDER (Cold Stge)	C. G. M. M. Ltd	Ab't Apr. 22	
*EMPRESS OF BRITAIN (Cold Stge)	Can. Pac. S. S. Ltd	Ab't Apr. 22	

To London

*BOSWORTH (Fan Ventilation)	Can. Pac. S. S. Ltd	Ab't Apr. 7	
*BATSFORD (Fan Ventilation)	Can. Pac. S. S. Ltd	Ab't Apr. 14	
*BILBSTER	Inter-Con. Trans. Ltd	Ab't Apr. 14	
*CORNISH POINT (Fan Ventilation)	Furness Line	Ab't Apr. 15	
CANADIAN TRAPPER	C. G. M. M. Ltd	Ab't Apr. 18	

To Glasgow

TUNISIAN (Cold Stge)	Can. Pac. S. S Ltd	Ab't Apr. 9	
CANADIAN RUNNER	C. G. M. M. Ltd	Ab't Apr. 12	
*CORSICAN (Cold Stge)	Can. Pac. S. S. Ltd	Ab't Apr. 21	
CANADIAN CARRIER	C. G. M. M. Ltd	Ab't Apr. 26	

To Cardiff and Swansea

CANADIAN AVIATOR	C. G. M. M. Ltd	Ab't Apr. 19	

To Avonmouth

*MOTTISFONT (Fan ventilation)	Can. Pac. S. S. Ltd.	Ab't Apr. 7	

To Manchester

MANCHESTER CORPORATION	Manchester Line	Ab't Apr. 15	

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*†FANAD HEAD †Cargo accepted for Londonderr .	Head Line	Ab't Apr. 12	

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*CARRIGAN HEAD	Head Line	Ab't Apr. 25	

To Southampton and Antwerp

*MELITA (Cold Stge)	Can. Pac. S. S. Ltd	Ab't Apr. 15	

To Havre and Bordeaux

BRANT COUNTY	Inter-Con. Trans. Lt	Ab't Apr. 21	

To Rotterdam and Hamburg

LORD DOWNSHIRE	Head Line	Ab't Apr. 30	

To Rotterdam

*BOSWORTH (Fan Ventilation)	Can. Pac. S. S. Ltd	Ab't Apr. 7	

To Australia and New Zealand

*OTARAMA	New Zealand Ship. Co.	Ab't Apr. 12	

To Havana and Kingston, Jamaica

*SICILIAN (Cold Stge)	Can. Pac. S. S. Ltd.	Ab't Apr. 22	

To St. John's, Newfoundland

*MAPLEDAWN *Sails from West St. John.	Canada S. S. Lines	Ab't Apr. 13	

FROM VANCOUVER

To Kobe, Yokahama and Shanghai
C. G. M. M. Ltd.—Blue Funnel Line Joint Service

CANADIAN HIGHLANDER	C. G. M. M. Ltd.	Ab't May 5	

To Kobe, Yokahoma, Hong-Kong and Manila
C. G. M. M. Ltd.—Blue Funnel Line Joint Service

IXION	Blue Funnel Line	Ab't Apr. 9	
TAL THYBIUS	Blue Funnel Line	Ab't Apr. 16	
TYNDAREUS	Blue Funnel Line	Ab't May 7	

To Kobe, Yokohama, Hong-Kong, Manila and Singapore

HAROLD DOLLAR	Can Robert Dollar Co.	Ab't May 3	

To Kobe, Yokohama, Shanghai, Hong-Kong, Manila, Moji and Nagasaki

§TOYOOKA MARU	Nippon Yusen Kaisha	Ab't Apr. 10	
§†HAWAII MARU	Osaka Shosen Kaisha	Ab't Apr. 12	
WEST JAPPA	Admiral Line	Ab't Apr. 15	
*‡MONGOLIAN PRINCE	Furness Withy Co	Ab't Apr. 15	
*§CITY OF SPOKANE	Admiral Line	Ab't Apr. 17	
*EMPRESS OF ASIA	Can. Pac. S. S. Ltd	Ab't Apr. 20	
*ALABAMA MARU	Osaka Shosen Kaisha	Ab't Apr. 28	
*§TOYAMA MARU	Nippon Yusen Kaisha	Ab't May 1	
*§†SIBERIAN PRINCE	Furness Withy Co	Ab't May 1	
*§†TOKUSHIMA MARU	Nippon Yusen Kaisha	Ab't May 3	
SUWA MARU	Nippon Yuson Kaisha	Ab't May 13	
*†ARABIA MARU	Osaka Shosen Kaisha	Ab't May 15	
*EMPRESS OF RUSSIA	Can. Pac. S. S. Ltd	Ab't May 18	

To Australian and New Zealand Ports

CANADIAN TRANSPORTER	C.G. M. M. Ltd	Ab't Apr 8	
‡MAKURA	Can. Australiasian Line	Ab't Apr. 14	
WAILLA	Can. Australasian Line	Ab't Apr. 16	
CANADIAN BRITISHER	C. G. M. M. Ltd	Ab't May 11	
HAURAKI	Can. Australasian Line	Ab't May 15	
‡NIAGARA	Can. Australasian Line	Ab't May 19	

To Calcutta and Bombay (India)

CANADIAN IMPORTER	C. G. M. M. Ltd	Ab't May 30	

‡Will also call at Honolulu and Suva.
*Does not call at Moji.
†Does not call at Manila.
§Does not call at Nagasaki.
Does not call at Shanghai or Hong-Kong.

Firms interested in acquiring patent rights for reversing gears applicable to metal cutting and other machinery are requested to communicate with H. M. Senior Trade Commissioner, 248 St. James St., Montreal.

HEAVY CHEMICALS AND DYESTUFFS

The Grasselli Chemical Co.
LIMITED

Manufacturing Chemists

Toronto, Ontario

Branch Office: MONTREAL, QUE. **Works: HAMILTON, ONT**

Buyers' Guide to Canadian Manufactures

List of Articles which will Enable the Purchaser to Know the Manufacturers of Made-in-Canada Goods. Rates for insertion in this department, $4.00 per heading per year (12 insertions).

ABRASIVES
*Canadian Hart Wheels, Limited, Hamilton, Ont.
*Dominion Abrasive Wheel Co., New Toronto, Ont.
*Norton Company of Canada, Ltd., Hamilton, Ont.

ACCOUNT BOOKS
*The Brown Bros., Ltd., Toronto.

ACCUMULATORS, hydraulic
*The Hydraulic Machinery Co., Limited, Montreal.

ACETYLENE GAS
*The Prest-O-Lite Company of Canada, Ltd., Toronto, Ont.

ACETYLENE GAS BURNERS
Economic Acetylene Burner Co., Toronto, Ont.
*The Prest-O-Lite Company of Canada, Ltd., Toronto, Ont.

ACIDS
*The Grasselli Chemical Co., Ltd., Toronto.
*The Nichols Chemical Co., Ltd., Montreal, Que.

ADVERTISING NOVELTIES
Lawson & Jones, Ltd., London, Ont.

AERATED BEVERAGES
Charles Gurd & Co., Ltd., Montreal, Que.
J. J. McLaughlin, Ltd., Toronto.

AIR COMPRESSORS
*Canadian Ingersoll-Rand Co., Sherbrooke, Que.
*Smart-Turner Machine Co., Ltd., Hamilton, Ont.

AIR LIFT PUMPS
*Canadian Ingersoll-Rand Co., Sherbrooke, Que.

ALCOHOL
*Canadian Industrial Alcohol Company, Ltd., Montreal, Que.

ALKALIES
Brunner, Mond Canada, Limited, Amherstburg, Ont.

ALUMINUM
*Northern Aluminum Co., Ltd., 1805 Traders Bank, Toronto.

ALUMINUM COOKING UTENSILS
"Ideal" Aluminum Products, Ltd., Toronto.

AMMONIA
Canadian Ammonia Co., Ltd., Toronto, Ont.

ANCHORS, all steel
Beauchemin & Fils, Ltd., Sorel, Que.

ANGLE BARS
*Burlington Steel Co., Ltd., Hamilton, Ont.
*MacKinnon Steel Co., Limited, Sherbrooke, Que.
*The Steel Company of Canada, Ltd., Hamilton, Ont.

ARSENIC
*Deloro Smelting & Refining Co., Limited, Deloro, Ont.

ARTIFICIAL LIMBS
Chesley Artificial Limb Co., Ltd., Hantsport, N.S.

ASBESTOS
Atlas Asbestos Company, Limited Montreal, Que.
*Eureka Mineral Wool & Asbestos Co., Toronto, Ont.

ASBESTOS SHEATHING
*Eureka Mineral Wool & Asbestos Co., Toronto, Ont.

ASBESTOS SHEET AND PISTON PACKINGS
Atlas Asbestos Company, Limited, Montreal, Que.
*Eureka Mineral Wool & Asbestos Co., Toronto, Ont.

ASBESTOS STEAM PIPE AND BOILER COVERINGS
Atlas Asbestos Company, Limited, Montreal, Que.
*Eureka Mineral Wool & Asbestos Co., Toronto, Ont.

ASBESTOS TEXTILES
Atlas Asbestos Company, Limited, Montreal, Que.
*Eureka Mineral Wool & Asbestos Co., Toronto, Ont.

AUTOMOBILE PARTS
*Dominion Forge & Stamping Co., Walkerville, Ont.

AUTOMOBILE TIRES
Ames-Holden-McCready, Limited, Montreal, Que.

AWNING CORD (cotton)
Hamilton Cotton Co., Hamilton, Ont.

AXLES
Guelph Spring & Axle Co., Ltd., Guelph, Ont.

AXLES, carriage and automobile
Guelph Spring & Axle Co., Ltd., Guelph, Ont.

BABBITT METAL
Alonzo W. Spooner, Ltd., Port Hope, Ont.
Beveridge Supply Co., Limited, Montreal, Que.
*Hoyt Metal Co., Toronto, Ont.
Magnolia Metal Co. of Canada, Ltd., Montreal, Que.
*The Canada Metal Co., Toronto, Ont.
*Tallman Brass & Metal, Ltd., Hamilton, Ont.

BAGS, Cotton
The Canadian Bag Co., Limited, Montreal, Que.

BAGS, jute
The Canadian Bag Co., Limited, Montreal, Que.

BAGS, travelling
J. Eveleigh & Co., Ltd., Montreal.
Lamontague, Ltd., Montreal, Que.
*The M. Langmuir Mfg. Co., of Toronto, Ltd., Toronto, Ont.

BAND RESAWS
*Canada Machinery Corporation, Limited, Galt, Ont.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.

BAND SAWS
*E. C. Atkins & Co., Inc., Hamilton, Ont.

BANK FITTINGS
The Canadian Office & School Furniture Co., Ltd., Preston, Ont.

BANK AND OFFICE RAILINGS AND CAGES
*Canada Wire and Iron Goods Co., Hamilton, Ont.
*Dennis Wire & Iron Works Co., London, Ont.
*The Geo. B. Meadows, Toronto, Wire, Iron & Brass Works Co., Ltd., Toronto, Ont.

BARRELS, steel, and containers
*Smart-Turner Machine Co., Ltd., Hamilton, Ont.

BARS, iron
London Rolling Mill Co., Ltd., London, Ont.

BARS, steel
London Rolling Mill Co., Ltd., London, Ont.

BASEBALL GOODS
A. J. Reach Co., Brantford, Ont.

BATHS, enamelled
Amherst Foundry Co., Ltd., Amherst, N.S.

BATTERIES, dry
*The Canadian National Carbon Co., Ltd., Toronto, Ont.

BATTERIES, Flashlight
*The Canadian National Carbon Co., Ltd., Toronto, Ont.

BATTERIES, Storage
*The Canadian National Carbon Co., Ltd., Toronto, Ont.

BEARINGS, pillow block and upright
*Canadian Fairbanks-Morse Company, Ltd., Montreal, Que.

BELT HOOKS
*Torrington Company, Limited, Upper Bedford, Que.

BELTING CHAINS
*Canadian Link-Belt Company, Ltd., Toronto, Ont.

BELTING, elevator
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.

BELTING, leather
The Beardmore Belting Co., Ltd., Toronto, Ont.
*J. L. Goodhue & Co., Danville, Que.
*McArthur Beltings, Limited, Brockville, Ont.
*The D. K. McLaren Belting Co., Ltd., Montreal, Que.
*The J. C. McLaren Belting Co., Ltd., Montreal, Que.

BELTING, rubber
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
*Gutta Percha and Rubber Ltd., Toronto, Ont.

BELTING, stitched cotton duck
*Dominion Belting Co., Ltd., Hamilton, Ont.

BENT GOODS
The Crown Lumber Co., Woodstock, Ont.

BISCUITS
The Montreal Biscuit Co., Montreal, Que.

BLACK SHEETS
*A. C. Leslie & Co., Montreal, Que.

BLANKETS
Slingsby Mfg. Co., Ltd., Brantford, Ont.
J. Walshaw & Son, Ltd., Bolton, Ont,

BLANKETS, horse
Slingsby Mfg. Co., Ltd., Brantford, Ont.
J. Walshaw & Son, Ltd., Bolton, Ont.

BLASTING ACCESSORIES
Canadian Explosives, Ltd., Montreal, Que.

BLEACHING POWDER
*Canadian Salt Co., Ltd., Windsor, Ont.

BLOWERS
*The Canadian Blower & Forge Co., Ltd., Kitchener, Ont.

BOATS OF ALL KINDS
Peterboro Canoe Co., Ltd., Peterboro, Ont.

BOBBINS
Canada Spool & Bobbin Co., Ltd., Walkerton, Ont.

BOILER COMPOUND
Beveridge Supply Co., Limited, Montreal, Que.

BOILER COMPOUND AND OILS
Electric Boiler Compound Co., Ltd., Guelph, Ont.

BOILER GRAPHITE
Black Donald Graphite Company, Limited, Calabogie, Ont.

BOILER LININGS AND COVERINGS
Beveridge Supply Co., Ltd., Montreal, Que.

BOILERS
*Canadian Mead Morrison Co., Ltd., Montreal, Que.
*Goldie & McCulloch Co., Limited Galt, Ont.
*E. Leonard & Sons, Ltd., London Ont.
J. & R. Weir, Montreal, Que.
Taylor-Forbes Co., Ltd., Guelph
*The Waterous Engine Works Co., Ltd., Brantford, Ont.

BOILERS, hot water or steam
Warden King, Ltd., Montreal.

BOILERS, steam
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.

BOILERS, steam and brass work
*The Waterous Engine Works Co., Ltd., Brantford, Ont.

BOLTS AND NUTS
*The Canadian Tube & Iron Co., Ltd., Montreal, Que.
*The National Acme Mfg. Co., Montreal, Que.
*The Steel Company of Canada, Ltd., Hamilton, Ont.

BOOKBINDERS
*The Brown Bros., Ltd., Toronto.

BOOKCASES
*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.

BOOKCASES, sectional (Gunn)
The George McLagan Furniture Co., Ltd., Stratford, Ont.

BOOKS, blank
*The Brown Bros., Ltd., Toronto.

BOOTS AND SHOES
Ames—Holden—McCready, Limited, Montreal, Que.
J. Leckie Co., Ltd.
The John Ritchie Co., Ltd., Quebec, Que.

BOXES, cellular and fibre board
*Hinde & Dauch Paper Co. of Canada, Limited, Toronto.
*Thompson & Norris Co., of Canada, Ltd., Toronto and Montreal.

BOXES, steel shop
*Steel Trough and Machine Co., Ltd., Tweed, Ont.

BOXES AND SHOOKS, wooden
The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.

BOXES, wooden
Barchard & Co., Ltd., Toronto.

BRAKE SHOES
*Canadian Hart Wheels, Limited, Hamilton, Ont.

BRANDS, burning
Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS AND BRONZE WIRE
*Standard Underground Cable Co of Canada, Ltd., Hamilton, Ont.

BRASS ENGRAVERS
Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS FOUNDERS AND FINISHERS
*The Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.
Sully Brass Foundry, Limited, Toronto
*Tallman Brass & Metal, Ltd., Hamilton, Ont.

*For Display Advertisement see Index, Page 41

The James Morrison Brass Mfg. Co., Ltd., Toronto, Ont.
*The Kerr Engine Co., Limited, Walkerville, Ont.

BRASS RODS, SHEETS AND PLATES
*Brown's Copper and Brass Rolling Mills, Ltd., New Toronto.

BRASS TUBING, seamless
Canadian Seamless Wire Co., Ltd., Toronto, Ont.

BRASS WIRE
Canadian Seamless Wire Co., Ltd., Toronto.

BRASS WORK, church
Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS WORK, special
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.

BRICK
National Brick Co. of Laprairie, Laprairie, Que.

BRICK, enamel
National Brick Co. of Laprairie, Laprairie, Que.

BRICK, pressed
National Brick Co. of Laprairie, Laprairie, Que.

BRICK, rubbing
*Canadian Hart Wheels, Limited, Hamilton, Ont.

BRICK, sewer.
National Brick Co. of Laprairie, Laprairie, Que.

BRIDGES, Railway and Highway
*Canadian Des Moines Steel Co., Limited, Chatham.
*Hamilton Bridge Works Co., Ltd., Walkerville, Ont.
*The Canadian Bridge Co., Ltd., Hamilton, Ont.
*McGregor & McIntyre, Ltd., Toronto, Ont.
*Dominion Bridge Co., Montreal.
*Mackinnon Steel Co., Ltd., Sherbrooke, Que.

BROOMS
Simms, T. S., & Co., Limited, St. John, N.B.
Stevens-Hepner Co., Limited, Port Elgin, Ont.

BRONZE SHEETS, RODS, PLATES
*Brown's Copper and Brass Rolling Mills, Ltd., New Toronto. Que.

BRUSHES
Simms, T. S., & Co., Limited, St. John, N.B.
Stevens-Hepner Co., Ltd., Port Elgin, Ont.

BRUSHES, MOTOR AND GENERATOR
Dominion Carbon Brush Co., Toronto.

BRUSHES, carbon
*Canadian National Carbon Co., Ltd., Toronto.

BUCKET TANKS
*MacKinnon Steel Co., Ltd., Sherbrooke, Que.
*The Bennett & Wright Co., Ltd., Toronto, Ont.

BUILDING FELT AND PAPER
Beveridge Supply Co., Limited, Montreal, Que.
*Eureka Mineral Wool & Asbestos Co., Toronto, Ont.
*The Barrett Co., Ltd., Toronto and Montreal

CHEMICALS
Canadian Laboratory Supplies, Ltd., Toronto, Ont.
*The Grasselli Chemical Co., Ltd., Toronto, Ont.
*The Nichols Chemical Co., Ltd. Montreal, Que.

BUNGS, wooden for barrels
Wm. H. White, Ville St. Pierre, Montreal, Que.

BUCKLES, shoe and coat
Parmenter & Bulloch Co., Limited, Gananoque, Ont.

BURLAPS
The Canadian Bag Co., Limited, Montreal, Que.

BURLAPS, decorative
Dominion Oil Cloth and Linoleum Co., Limited, Montreal, Que.

CABLES, electric light, power, telephone and telegraph
*Northern Electric Company, Limited, Montreal, Que.
*Standard Underground Cable Co. of Canada, Ltd., Hamilton, Ont.

CABLES, wire
*The Dominion Wire Rope Co., Ltd., Montreal, Que.
*The B. Greening Wire Co., Ltd., Hamilton, Ont.

CALENDARS, ADVERTISING NOVELTIES, etc.
Lawson & Jones, Ltd., London.

CAMERAS
Canadian Kodak Co., Ltd., Toronto, Ont.

CAMPERS' OUTFITTERS
Slingsby Mfg. Co., Ltd., Brantford, Ont.

CANADA SILVER
*Brown's Copper and Brass Rolling Mills, Ltd., New Toronto.

CHICLETS & CHEWING GUM
Canadian Chewing Gum Company, Ltd., Toronto.

CANOES
Peterboro Canoe Co., Ltd., Peterboro, Ont.
The "Canadian" Canoe Co., Ltd., 216 Rink St., Peterborough, Ont.

CANS, baking powder, etc.
American Can Co., Montreal (Que.) and Hamilton (Ont.).
A. R. Whittall Can. Co., Ltd., Montreal, Que.
*MacDonald Mfg. Co., Ltd., Toronto, Ont.

CANS, fruit
American Can Co., Montreal (Que.) and Hamilton (Ont.).
A. R. Whittall Can Co., Ltd., Montreal, Que.
*MacDonald Mfg. Co., Ltd., Toronto, Ont.

CANS, iron, lead and putty
A. R. Whittall Can. Co., Ltd., Montreal, Que.

CANS, tin
A. R. Whittall Can. Co, Ltd., Montreal, Que.
American Can Co., Montreal (Que.) and Hamilton (Ont.).
*MacDonald Mfg. Co., Ltd., Toronto, Ont.

CAPS, cloth
John W. Peck & Co., Ltd., Montreal, Que.

CARBIDE
*Canada Carbide Co., Ltd., Montreal. Que.

CARBONS-PROJECTOR
*Canadian National Carbon Co., Toronto, Ont.

CARBONIC ACID GAS
*Canadian Carbonate Co., Montreal.
*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.

BRASS GOODS
*The Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.

CARPETS AND RUGS
Toronto Carpet Mfg. Co., Limited, Toronto.

CARRIERS, box and barrel
*Canadian Mathews Gravity Carrier

CARRIERS
*Richards-Wilcox Canadian Co., Ltd., London, Ont.

CARRIERS, brick
*Canadian Mathews Gravity Carrier Co., Limited, Toronto.
*Richards-Wilcox Canadian Co., Ltd., London, Ont.

CARS
*National Steel Car Co., Ltd., Hamilton, Ont.

CARS, industrial
*MacKinnon Steel Co., Ltd., Sherbrooke, Que.

CARTONS, lithographed
Consolidated Lithographing and Mfg. Co., Ltd., Montreal, Que.
Harris Lithographing Co., Ltd. Toronto, Ont.

CASTINGS, Alloy
*The Electric Steel & Metals Co., Ltd., Welland, Ont.

CASTINGS, aluminum, brass and bronze
*Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.
Fittings Limited, Oshawa, Ont.
Sully Brass Foundry, Limited, Toronto.

CASTINGS, grey iron
*Canadian Rumely Co., Ltd., Toronto, Ont.
Fittings Limited, Oshawa, Ont.
*The Goldie & McCulloch Co., Ltd. Galt, Ont.
*Wm. Kennedy & Sons, Ltd., Owen Sound, Ont.

CASTINGS, malleable iron
Fittings Limited, Oshawa, Ont.
*Galt Malleable Iron Co., Ltd., Galt, Ont.
Mapleleaf Manufacturing Comp-Smith's Falls, Ont.

CASTINGS, steel
Beauchemin & Fils, Ltd., Sorel, Que.
*Canadian Steel Founderies, Ltd., Montreal, Que.
*Dominion Foundries and Steel Co., Ltd., Hamilton, Ont.
*Electric Steel & Metals Co., Ltd., Welland, Ont.
*Wm. Kennedy & Sons, Ltd., Owen Sound. Ont.

CATALOGUE MAKERS
Grip, Ltd., Toronto, Ont.

CATALOGUE COVERS, by new lithographing process
Harris Lithographing Co., Ltd., Toronto, Ont.

CAUSTIC SODA
*Canadian Salt Co., Ltd., Windsor.

CEMENT WATERPROOFING
*Trussed Concrete Steel Company of Canada, Ltd., Walkerville, Ont.

CEMENTS, High Temp.; plastic, liquid
Beveridge Supply Co., Limited, Montreal, Que.

CENTRIFUGAL PUMPS
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

CHAIN, Detachable & Riveted
Fittings Limited, Oshawa, Ont.

CHAINS, for elevators, conveyors and drives
*Canadian Link-Belt Company, Ltd., Toronto, Ont.
Dodge Manufacturing Co. of Canada, Ltd., Toronto.

CHAIRS
*Office Specialty Mfg. Co., Ltd. Newmarket, Ont.

CHAIRS; Folding and Assembly Seating
Stratford Mfg. Co., Ltd., Stratford, Ont.

CHAIRS, rattan and upholstered
Imperial Rattan Co., Ltd., Stratford, Ont.

CHEMISTS, industrial
*Milton Hersey Co., Montreal.

CIRCULAR CUTTERS, solid steel
*Galt Knife Co., Ltd.
The Peter Hay Knife Co., Ltd., Galt, Ont.

CIRCULAR SAWS
*E. C. Atkins & Co., Inc., Hamilton, Ont.

CLAM SHELL BUCKETS
*Canadian Mead Morrison Co., Ltd., Montreal, Que.

CLOCKS, time
*International Business Machines Co., Ltd., Toronto, Ont.

CLOCKS, watchmen's
*The Bennett & Wright Co., Ltd., Toronto, Ont.

CLOSET SEATS
*Goderich Organ Co., Goderich, Ont.

CLOTHING
John W. Peck & Co., Ltd., Montreal, Que.

CLOTHING, leather and sheepskin lined coats
*A R. Clarke & Co., Ltd., Toronto

CLOTHING, Mackinaw
The Carss Mackinaw Clothing Co., Ltd., Orillia, Ont.

CLOTHES LINES, cotton
Hamilton Cotton Co., Hamilton, Ont.

COAL
*British Empire Steel Corp., Montreal, Que.
Standard Fuel Co., Toronto, Ont

COBALT OXIDE
*Deloro Smelting & Refining Co., Ltd., Deloro, Ont.
The Coniagas Reduction Co., Ltd., St. Catharines, Ont.

COBALT METAL
*Deloro Smelting & Refining Co., Ltd., Deloro, Ont.

COFFEE
S. H. Ewing & Sons, Montreal.

COLD DRAWN SHAPES, flats, squares and hexagons
*The Canadian Drawn Steel Co., Ltd., Hamilton, Ont.
*Union Drawn Steel Co., Ltd., Hamilton, Ont.

COLD STORAGE DOORS
*John Hillock & Co., Ltd., Toronto.

COLLARS
"Kantkrack" Composition
Parsons & Parsons Canadian Co., Hamilton, Ont.

COLORS
*A. Ramsay & Son Co., Montreal.

COMMERCIAL STATIONERY
*Brown Bros., Ltd., Toronto, Ont.

CONCRETE COATINGS, PAINTS, Etc.
*The Imperial Varnish & Color Co., Ltd., Toronto, Ont.

CONCRETE HARDENER AND WATERPROOFER
Beveridge Supply Co., Limited, Montreal, Que.
Sturgeons Limited, Toronto.

CONDENSERS, Barometic
*Canadian Ingersoll-Rand Co., Sherbrooke, Que.

CONDENSERS, jet and surface
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

CONDENSERS, rotary jet
*The Goldie & McCulloch Co., Ltd. Galt, Ont.

CONDUIT FOR INTERIOR WIRING
Conduits Co., Ltd., Toronto, Ont.
*National Conduit Co., Limited, Toronto.

*For Display Advertisement see Index, Page 41

CONFECTIONERY
Ganong Bros., Ltd., St. Stephens, N.B.
Moirs, Ltd., Halifax, N.S.
The Montreal Biscuit Co., Montreal, Que.

CONTAINER BOARD—strong container
*Bathurst Lumber Co., Ltd., Bathurst, N.B.

CONTRACTOR'S PLANT
*Canadian Mead Morrison Co., Ltd., Montreal, Que.

CONVEYORS
*Canadian Link-Belt Company, Ltd., Toronto, Ont.
*Canadian Mathews Gravity Carrier Co., Toronto.
Dodge Manufacturing Co. of Canada, Ltd., Toronto.

COPPER
*Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.
*Consolidated Mining & Smelting Co. of Canada, Ltd., Montreal.

COPPER, SHEETS, PLATES, BARS, RODS
*Brown's Copper and Brass Rolling Mills, Ltd., New Toronto, Ont.
*Booth-Coulter Copper & Brass Co Ltd., Toronto, Ont.

COPPERSMITHS
*Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.

COPPER TUBING, seamless
Canadian Seamless Wire Co., Ltd., Toronto, Ont.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.

CONDUIT-FLEXIBLE-"BRAIDUCT"
The Dalyte Electric Limited, Guelph, Ont.

COPPER WIRE
Canadian Seamless Wire Co., Ltd., Toronto, Ont.
*Standard Underground Cable Co. of Canada, Ltd., Hamilton, Ont.

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Harold C. Shipman & Co., Ottawa, Ont.

CORKS
S. H. Ewing & Sons, Montreal, Que.

CORK CARPET
Dominion Oil Cloth and Linoleum Co., Ltd., Montreal, Que.

CORRUGATED PAPER BOXES
Corrugated Paper Box Co., Ltd., Toronto, Ont.
*Hinde & Dauch Paper Co. of Canada, Limited. Toronto.
Standard Paper Box Company, Ltd., Montreal, Que.
*Thompson & Norris Co., of Canada, Ltd., Toronto and Montreal.

CORSETS
Dominion Corset Co., Quebec, Que.

COTTONS
*Montreal Cottons, Ltd., Valleyfield, P.Q.

COTTONADES
Hamilton Cotton Co., Hamilton, Ont.

COUPLERS
*Canadian Steel Foundries, Ltd., Welland, Ont.

CRANES
*Northern Crane Works, Walkerville, Ont.
*The Herbert Morris Crane and Hoist Co., Ltd., Niagara Falls, Ont.

CREAM CHEESE, Ingersoll
The Ingersoll Packing Co., Ltd., Ingersoll, Ont.

CREAM SEPARATORS AND MILK CLARIFIERS
De Laval Dairy Supply Co., Peterboro, Ont.

CREAMERY AND CHEESE FACTORY MACHINERY AND SUPPLIES
De Laval Dairy Supply Co., Ltd., Peterboro, Ont.

CREOSOTED MATERIALS
*The Barrett Co., Ltd., Toronto and Montreal.

CRUSHERS, Rock and Ore
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.

CUPOLAS
*Northern Crane Works, Ltd., Walkerville, Ont.

CUPS, presentation
Standard Silver Co., Toronto, Ont.

CURTAINS, chenille
Hamilton Cotton Co., Hamilton, Ont.

CUTLERY
Standard Silver Co., Toronto, Ont.

CUTTERS, machine
*Pratt & Whitney Co., Dundas, Ont.

DECALCOMANIA TRANSFERS
Canada Decalcomania Co., Toronto, Ont.

DENIMS
Hamilton Cotton Co., Hamilton, Ont.

DERAILS
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

DESIGNERS AND PRINTERS OF BOOKLETS, Etc.
Grip, Ltd., Toronto, Ont.

DESIGNERS OF LABOR SAVING DEVICES
Harold C. Shipman & Co., Ottawa, Ont.

DESKS
*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.
The Macey Office Equipment Co., Toronto.

DIE CASTINGS
*Tallman Brass & Metal, Limited Hamilton, Ont.

DIES
*Butterfield & Co., Rock Island, P.Q.
*Pratt & Whitney Co., Dundas, Ont.

DIES, for metal stampings.
Larsen & Shaw, Ltd., Walkerton.

DINING ROOM SUITES
The George McLagan Furniture Co., Ltd., Stratford, Ont.

DISINFECTING APPARATUS

DOOR HANGERS
*Richards Wilcox Canadian Co., Ltd., London, Ont.

DREDGES
*Canadian Mead Morrison Co., Ltd., Montreal, Que.

DRILL PRESSES
*Canada Machinery Corporation, Ltd., Galt, Ont.

DRILL SHARPENERS
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.

DRILLS
*John Morrow Screw & Nut Co., Ltd., Ingersoll, Ont.
*Pratt & Whitney Co., Dundas, Ont.

DRIFT BOLTS OR SPIKES
London Rolling Mill Co., Ltd., London, Ont.

DROP HAMMERS
*Canada Machinery Corporation, Ltd., Galt, Ont.

DRUMS, steel, and containers
*Smart-Turner Machine Co., Ltd., Hamilton, Ont.

DRY COLORS
*The Imperial Varnish & Color Co., Ltd., Toronto.

DUMB WAITERS
Turnbull Elevator Mfg. Co., Toronto, Ont.

DURABLE WIRE ROPE
*The Dominion Wire Rope Co., Ltd., Montreal, Que.

DYNAMITE
Canadian Explosives, Ltd., Montreal, Que.

DYNAMOS
*Jones & Moore Electric Co., Ltd., Toronto, Ont.
*The Canadian Crocker-Wheeler Co., Ltd., St. Catharines, Ont.

DYNAMOS, plating
*Jones & Moore Electric Co., Ltd., Toronto, Ont.

EIDERDOWN
Galt Knitting Co., Ltd., Galt, Ont.

ELECTRICAL AND GAS FIXTURES
W. H. Banfield & Sons, Toronto.
The Garth Co., Montreal, Que.
The James Morrison Brass Mfg. Co., Ltd., Toronto, Ont
*Tallman Brass & Metal, Ltd., Hamilton, Ont.

ELECTRIC APPLIANCES
*Canadian Crocker-Wheeler Co., Ltd., St. Catharines, Ont.
*Canadian Westinghouse Co., Ltd., Hamilton, Ont.

ELECTRIC LAMPS
The Dalyte Electric Limited, Guelph, Ont.

ELECTRICAL COMPOUNDS
Standard Paint Co. of Canada, Ltd., Montreal, Que.

ELECTRIC PLATE WARE
Roden Bros., Ltd., Toronto, Ont.

ELECTRICAL WIRING DEVICES
W. H. Banfield & Sons, Toronto.

ELECTRODES, carbon
*Canadian National Carbon Co., Ltd., Toronto, Ont.

ELECTROTYPING
Central Press Agency, Ltd., Toronto.

ELECTRICAL SUPPLIES
*Canadian Westinghouse Co., Ltd., Hamilton, Ont.
*Jones & Moore Electric Co., Ltd.,
*Northern Electric Co., Ltd., Montreal, Que.

ELECTRO-SILVER PLATED WARE
Standard Silver Co., Toronto, Ont.

ELEVATING MACHINERY
*Canadian Link-Belt Company, Ltd., Toronto, Ont.
*Canadian Mathews Gravity Carrier Co., Toronto, Ont.
Dodge Manufacturing Co. of Canada, Ltd., Toronto.

ELEVATORS
*MacKinnon Steel Co., Ltd., Sherbrooke, Que.
Turnbull Elevator Mfg. Co., Toronto, Ont.
*The Waterous Engine Works Co. Ltd,, Brantford, Ont.
*Northern Crane Works, Ltd., Walkerville, Ont.

ELEVATORS FOR ALL PURPOSES
*The Waterous Engine Works Co., Ltd., Brantford, Ont.

ELEVATOR GATES AND DOORS
Turnbull Elevator Mfg. Co., Ltd., Toronto, Ont.
*The A. B. Ormsby Co., Ltd., Toronto, Ont.

ELEVATOR GUARDS
*The Geo. B. Meadows, Toronto.
Iron & Brass Goods Works Co., Ltd., Toronto, Ont.
*Canada Wire and Iron Goods Co., Hamilton, Ont.

EMERY GRINDERS
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

EMERY WHEELS
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

ENAMELS
Berry Brothers, Inc., Walkerville, Ont.
Dominion Paint Works, Limited, Walkerville, Ont.
*The Imperial Varnish & Color Co., Ltd., Toronto, Ont.

ENAMEL AND TIN WARE
*McClary Mfg. Co., London, Ont.

ENGINES
*E. Leonard & Sons, Limited, London, Ont.
*Goldie & McCulloch Co., Ltd., Galt, Ont.
J. & R. Weir, Montreal, Que.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.

ENGINES, gas and gasoline
*Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
*Hamilton Motor Works, Ltd., Hamilton, Ont.
*Massey-Harris Co., Ltd., Toronto.

ENGINES, gasoline, tractor, plowing and threshing
Sawyer-Massey Co., Ltd., Hamilton; Ont.

ENGINES, hoisting
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.
*Canadian Mead Morrison Co., Ltd., Montreal, Que.
*The Waterous Engine Works Co. Ltd., Brantford, Ont.

ENGINES, marine, gasoline and kerosene
Bruce, Stewart & Co., Ltd., Charlottetown, P.E.I.

ENGINES, steam plowing and threshing
Sawyer-Massey Co., Ltd., Hamilton, Ont.

ENGRAVERS, photo
Grip, Ltd., Toronto, Ont.

ENGRAVERS, half-tone
Grip, Ltd., Toronto

ENGRAVERS AND PRINTERS steel plate
American Bank Note Co., Ottawa, Ont.

ENGRAVERS AND PRINTERS bank note
American Bank Note Co., Ottawa, Ont,

ENGRAVING
*J. L. Jones Engraving Co., Toronto, Ont.

ENGRAVING, copper and steel plate
Pritchard-Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

ENSILAGE AND STRAW CUTTERS
J. Fleury's Sons, Aurora, Ont.
*Ontario Wind Engine & Pump Co., Ltd., Toronto, Ont.

ENVELOPES
*Barber-Ellis Co., Ltd., Toronto.
Canada Envelope Co., Montreal, Que.

EXPANSION BOLTS
Beveridge Supply Co., Limited, Montreal, Que.

EXPERTS IN PATENT CAUSES
*Ridout & Maybee, Toronto, Ont.

EXPLOSIVES, high
Canadian Explosives, Ltd., Montreal, Que.

FACE PLATE JAWS
*Ker & Goodwin, Brantford, Ont.

FACTORY SUPPLIES, cheese and creamery
De Laval Dairy Supply Co., Ltd., Montreal, Que.

FANS
*The Canadian Blower & Forge Co., Ltd., Kitchener, Ont.

FENCING, wire
*C. H. Johnson & Sons, Ltd., Montreal, Que.

FELTS, pulp and paper makers
Ayers, Ltd., Lachute Mills, P.Q.

FENCES AND GATES
*Dennis Wire & Iron Works Co., London, Ont.
*Canada Wire & Iron Goods Co., Hamilton, Ont.
*Frost Steel & Wire Company, Limited, Hamilton, Ontario.

FIBRE PAILS
*The E. B. Eddy Co., Ltd., Hull, Que.

FIBRE (vulcanized), sheets, rods, tubes, etc.
*The Diamond State Fibre Co. of Canada, Ltd., Toronto.

FIBREBRICK, Plastic, jointless
Beveridge Supply Co., Limited, Montreal, Que.

FILES.
Henry Disston & Sons, Ltd., Toronto, Ont.
*John Morrow Screw & Nut Co., Ltd., Ingersoll, Ont.
*The Nicholson File Co., Port Hope
The Ingersoll File Company, Ltd Ingersoll, Ont.

FILING CABINETS
*Office Specialty Co., Newmarket, Ont.

FILING DEVICES
The Macey Office Equipment Co. Toronto.

FILING EQUIPMENT, wood & steel
*Office Specialty Mfg. Co., Ltd Newmarket, Ont.

FILING SYSTEMS
*Office Specialty Mfg. Co., Ltd Newmarket, Ont.

FIRE ALARMS
*Northern Electric Co., Ltd., Montreal, Que.

FIRE BRICK
Dominion Fire Brick & Clay Products, Ltd., Moose Jaw, Sask.
FIRE BRICK AND CLAY
Dominion Fire Brick & Clay Products, Ltd., Moose Jaw, Sask.
FIRE BRICK, PLASTIC
Beveridge Supply Co., Limited, Montreal, Que.
FIRE DOOR HARDWARE
*Richard Wilcox Canadian Co., Ltd., London, Ont.
FIRE DOORS
*A. B. Ormsby Co., Ltd., Toronto.
*The Pedlar People, Ltd., Oshawa, Ont.
FIRE ENGINES
American LaFrance Fire Engine Company of Canada, Limited, Toronto.
*Waterous Engine Works Co., Ltd., Brantford, Ont.
FIRE ESCAPES
American LaFrance Fire Engine Company of Canada, Limited, Toronto.
Canadian Des Moines Steel Co., Chatham, Ont.
*Canada Wire & Iron Goods Co., Hamilton, Ont.
*Dennis Wire & Iron Works Co., London, Ont.
*McGregor & McIntyre, Ltd., Toronto, Ont.
FIRE EXTINGUISHERS
*A. B. Ormsby Co., Ltd., Toronto.
American LaFrance Fire Engine Company of Canada, Limited, Toronto.
*Booth-Coulter Copper & Brass Co. Ltd., Montreal, Que.
*The Bennett & Wright Co., Ltd. Toronto, Ont.
FIRE FIGHTING APPARATUS
American LaFrance Fire Engine Company of Canada, Limited, Toronto.
*Waterous Engine Works Co., Ltd., Brantford, Ont.
FIRE HOSE
*Canadian Consolidated Rubber Co. of Canada, Ltd., Montreal, Que.
*Gutta Percha & Rubber, Ltd., Toronto, Ont.
FIRE PREVENTION MATERIAL
*Chicago Bridge & Iron Works Bridgeburg, Ont.
*Eureka Mineral Wool & Asbestos Co., Toronto.
*The Bennett & Wright Co., Ltd., Toronto, Ont.
FIRE PROOF WINDOWS AND DOORS
*Canadian Metal Window & Steel Products, Limited, Toronto.
*A. B. Ormsby Co., Ltd., Toronto.
*Pedlar People, Ltd., Oshawa, Ont
*Trussed Concrete Steel Company of Canada, Ltd., Walkerville, Ont.
FIRE PROTECTION SYSTEMS
*Canadian Des Moines Steel Co., Limited, Chatham.
FIRE SPRINKLER SYSTEMS
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
*The Bennett & Wright Co., Ltd., Toronto, Ont.
*Purdy Mansell Co., Toronto, Ont.
FIRE AND WATER DEPARTMENT
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
The Garth Co., Montreal, Que.
FISH, Atlantic Sea-Foods
Maritime Fish Corporation, Ltd., Montreal, Que.
FITTINGS, Pipe
Fittings Limited, Oshawa, Ont.
FITTINGS FOR SOIL PIPE
Anthes Foundry, Ltd., Toronto.
FITTINGS, steam
Warden King Ltd., Montreal, Que.
FLOORING, hardwood
Seaman Kent Co., Ltd., Meaford, Ont.
FOLDING PAPER BOXES
Standard Paper Box Company, Ltd, Montreal, Que.
FORGES
*Canadian Blower & Forge Co., Ltd., Kitchener, Ont.
FORGINGS
*Canada Foundries & Forgings Co., Welland, Ont.
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
FORGINGS, drop
*Dominion Forge & Stamping Co., Walkerville, Ont.
FOUNDRY EQUIPMENT
*Northern Crane Works, Ltd., Walkerville, Ont.
FOUNTAIN FRUITS AND JUICES
J. J. McLaughlin, Ltd., Toronto.
FROGS AND CROSSINGS, manganese
Canadian Ramapo Iron Works, Ltd., Niagara Falls, Ont.
FUEL
Standard Fuel Co., Toronto, Ont.
FUR GARMENTS, men's and women's
Holt, Renfrew, Ltd., Quebec.
FUR GOODS
John W. Peck & Co., Ltd., Montreal, Que.
FURNACES
*McClary Mfg. Co., London, Ont.
FURNITURE; Camp and Verandah and Novelties
The Stratford Mfg. Co., Limited, Stratford, Ont.
FURNITURE, hall
The George McLagan Furniture Co., Ltd., Stratford, Ont.
FURNITURE, office
The Canadian Office & School Furniture Co., Ltd., Preston, Ont.
FURNITURE, reed and rattan
Imperial Rattan Co., Ltd., Stratford, Ont.

FUSES
*Economy Fuse & Mfg. Co., Montreal, Que.
GALVANIZED IRON
*A. C. Leslie & Co., Montreal.
GALVANIZED SHEETS
*Dominion Sheet Metal Co., Hamilton, Ont.
*The A. B. Ormsby Co., Ltd., Toronto, Ont.
GALVANIZERS
Acme Stamping & Tool Works, Ltd., Hamilton, Ont.
Fittings Limited, Oshawa, Ont.
*Ontario Wind Engine & Pump Co., Ltd., Toronto, Ont.
*The Pedlar People, Ltd., Oshawa.
GALVANIZED CUSTOM WORK
The Goold, Shapley & Muir Co., Ltd., Brantford, Ont.
GASOLINE ENGINES
*Ontario Wind & Pump Co., Ltd., Toronto, Ont.
De Laval Dairy Supply Co., Ltd., Peterboro, Ont.
*The Goold Shapley & Muir Co., Limited, Brantford, Ont.
GASOLINE FIRE ENGINES
American LaFrance Fire Engine Company of Canada, Limited, Toronto.
*Waterous Engine Works Co., Ltd., Brantford, Ont.
GASOLINE STORAGE SYSTEMS, special underground
*S. F. Bowser & Co., Toronto.
*Steel Trough & Machine Co., Ltd., Tweed, Ont.
GASOLINE
*The Imperial Oil Co., Ltd., Toronto, Ont.
GEARS, cut
*Hamilton Gear and Machine, Toronto.
GEARS (noiseless, waterproof)
*The Diamond State Fibre Co. of Canada, Ltd., Toronto.
GELATINE
Canada Gelatine Co., Ltd., Brantford, Ont.
GENERATORS
*Canadian Crocker-Wheeler Co., Ltd., St. Catharines, Ont.
*Canadian Westinghouse Co., Ltd., Hamilton, Ont.
GLASSWARE
Dominion Glass Co., Ltd., Montreal, Que.
GLASSWARE, cut
Roden Bros., Ltd., Toronto.
GLASS FOR BUILDINGS
Toronto Plate Glass Importing Co., Ltd., Toronto, Ont.
GLASS BENDERS
Toronto Plate Glass Importing Co., Ltd., Toronto, Ont.
GLASS, mirror
Toronto Plate Glass Importing Co., Ltd., Toronto, Ont.
GLOVES AND MITTS
*A. R. Clarke & Co., Ltd., Toronto.
Craig, Cowan Co., Ltd., Toronto
GLUE
Canada Glue Co., Ltd., Brantford, Ont.
GOLD-FILLED WIRE AND PLATE
Canadian Seamless Wire Co., Toronto, Ont.
GOLD AND SILVER REFINERS
Canadian Seamless Wire Co., Toronto, Ont.
GRAIN CRUSHERS, rapid, easy
J. Fleury's Sons, Aurora, Ont.
GRAPE JUICE
J. J. McLaughlin, Ltd., Toronto.
The Welch Co., Ltd., St. Catharines, Ont.
GRAPHITE, lubricating
Black Donald Graphite Company, Limited, Calabogie, Ont.
GRATES
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
GRAVITY CARRIERS
*Canadian Mathews Gravity Carrier Co., Toronto, Ont.
GRILLES, metal
*Canada Wire & Iron Goods Co., Hamilton, Ont.
*Dennis Wire & Iron Works Co., London, Ont.
GRINDING MACHINERY
*Ford Smith Machine Co., Ltd., Hamilton, Ont.
*Norton Company of Canada, Ltd., Hamilton, Ont.
GRINDING AND POLISHING MACHINERY
*Canadian Hart Wheels, Ltd., Hamilton, Ont.
GRINDING WHEELS
*Canadian Hart Wheels, Ltd., Hamilton, Ont.
*Norton Company of Canada, Ltd., Hamilton, Ont.
*The Dominion Abrasive Wheel Co., Ltd., New Toronto, Ont.
GRINDSTONES
*Richards-Wilcox Canadian Co., Ltd., London, Ont.
GUNN SECTIONAL BOOKCASES
The Geo. McLagan Furniture Co., Ltd., Stratford, Ont.
GUY ANCHORS
B. J. Coghlin Co., Ltd., Montreal.
GYPSUM PRODUCTS
De Laval Dairy Supply Co., Ltd., Peterboro, Ont.
HACK SAW BLADES AND FRAMES
*E. C. Atkins & Co., Inc., Hamilton, Ont.
HACK SAW MACHINES
*E. C. Atkins & Co., Inc., Hamilton, Ont.
HALL FURNITURE
The Geo. McLagan Furniture Co., Ltd., Stratford, Ont.
HANDLES (axe, pick, sledge hammers, etc.)
The Lachute Shuttle Co., Ltd., Lachute Mills, P.Q.
HANDLES, wood
Canada Spool & Bobbin Co., Ltd., Walkerton, Ont.
HAND SAWS
*E. C. Atkins & Co., Inc., Hamilton, Ont.
HANGERS
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
HARDWARE
*Richards-Wilcox Canadian Co., Ltd., London, Ont.
Taylor-Forbes Co., Ltd., Guelph, Ont.
HARNESS
Lamontagne, Ltd., Montreal, Que.
HATS, ladies' felt and straw
Toronto Hat Mfg. Co., Toronto.
HAULAGE, wire rope
*The Dominion Wire Rope Co., Ltd., Montreal, Que.
HEADING SAWS
*E. C. Atkins & Co., Inc., Hamilton, Ont.
HEATERS
*Waterous Engine Works Co., Ltd., Brantford, Ont.
HEATERS, feed water
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
HEATERS, WATER FEED
*Mason Regulator & Engineering Co., Ltd., Montreal, Que.
HEATING APPLIANCES
*C. A. Dunham Co., Ltd., Toronto.
*The Canadian Blower & Forge Co., Ltd., Kitchener, Ont.
HEATING SYSTEMS
*C. A. Dunham Co., Ltd., Toronto.
HEMLOCK, union and oak sole
Breithaupt Leather Co., Ltd., Kitchener, Ont.
HESSIANS
The Canadian Bag Co., Ltd., Montreal, Que.
HINGES
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
HOISTS, electric and pneumatic
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.
*Canadian Mead Morrison Co., Ltd., Montreal, Que.
*Northern Crane Works, Ltd., Walkerville, Ont.
HOSE, fire and rubber
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
*Gutta Percha & Rubber, Ltd., Toronto, Ont.
HOUSES, factory made
Wm. H. White, Ville St. Pierre, Montreal, Que.
HYDRAULIC TURBINES
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.
ICE CREEPERS
Parmenter & Bulloch Co., Ltd., Gananoque, Ont.
ICE MACHINE EQUIPMENT
Canadian Ice Machine Co., Limited, Toronto, Ont.
ICE-MAKING MACHINERY
The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.
INGOT METALS
*Brown's Copper & Brass Rolling Mills, Ltd., New Toronto, Ont.
INSERTED TOOTH SAWS
*E. C. Atkins & Co., Inc., Hamilton, Ont.
INSULATING COMPOUNDS
*The Imperial Varnish & Color Co., Ltd., Toronto.
INSULATION VULCANIZED FIBRE
*The Diamond State Fibre Co. of Canada, Ltd., Toronto.
INTERLOCKING RUBBER TILING
*Gutta Percha & Rubber Mfg. Co., of Toronto, Ltd., Toronto, Ont.
IRON
*British Empire Steel Corp., Montreal, Que.
IRON AND STEEL BARS
*Burlington Steel Co., Ltd., Hamilton, Ont.
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
IRON STAIRWAYS
*Canada Wire & Iron Goods Co., Hamilton, Ont.
*Dennis Wire & Iron Works Co., London, Ont.
*McGregor & McIntyre, Ltd., Toronto, Ont.
IRONWORK, architectural
*Canada Wire & Iron Goods Co., Hamilton, Ont.
IRONWORK, ornamental
*Canada Wire & Iron Goods Co., Hamilton, Ont.
INDUSTRIAL DESIGN PATENTS
Harold C. Shipman & Co., Ottawa, Ont.
JAM, canned goods, etc.
E. D. Smith & Son, Ltd.
JAPANS, enamels, etc.
Berry Brothers, Inc., Walkerville, Ont.
A. Muirhead Co., Ltd., Toronto
*The Imperial Varnish & Color Co Ltd., Toronto, Ont.

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JELLY POWDER
S. H. Ewing & Sons, Montreal.
JEWELRY, enamelled souvenir
*Caron Bros., Montreal, Que.
JEWELRY, gold-filled
*Caron Bros., Montreal, Que.
JOINTERS
*Canada Machinery Corporation, Ltd., Galt, Ont.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.
JOIST HANGERS
*Richards-Wilcox Canadian Co., Ltd., London, Ont.
JUNCTION BOXES, cable
*Standard Underground Cable Co. of Canada, Ltd., Hamilton, Ont.
KINDLING
Standard Fuel Co., Toronto, Ont.
KNIFE GRINDERS
*Canada Machinery Corporation, Ltd., Galt, Ont.
KNITTED GOODS
*Penman's, Ltd., Paris, Ont.
KNIVES
*Galt Knife Co., Ltd.
The Peter Hay Knife Co., Ltd., Galt, Ont.
Simonds Canada Saw Co., Ltd., Montreal, Que.
KNIVES, pulp and paper
Henry Disston & Sons, Toronto.
The Peter Hay Knife Co., Ltd., Galt, Ont.
KODAKS AND PHOTOGRAPHIC SUPPLIES
Canadian Kodak Co., Ltd., Toronto.
LABELS
Lawson & Jones, Ltd., London, Ont.
LABELS, lithographed
Consolidated Lithographing and Mfg. Co., Ltd., Montreal, Que.
Harris Lithographing Co., Ltd., Toronto, Ont.
LABORATORY SUPPLIES
Canadian Laboratory Supplies, Ltd., Toronto.
LACE LEATHER
F. C. McCordick, St. Catharines, Ont.
*The D. K. McLaren Belting Co., Ltd., Montreal, Que.
*The J. C. McLaren Belting Co., Ltd., Montreal, Que.
LADDERS
Stratford Mfg. Co., Ltd., Stratford, Ont.
LADLES, foundry
*Northern Crane Works, Ltd., Walkerville, Ont.
LAMPS, Gasoline, Vapor.
Coleman Lamp Company, Ltd., Toronto.
LATH
The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.
LATHE CHUCKS
*Ker & Goodwin, Brantford, Ont.
LATHES
*Canada Machinery Corporation, Ltd., Galt, Ont.
LAUNCHES
Peterboro Canoe Co., Ltd., Peterboro, Ont.
LAWN MOWERS
Taylor-Forbes Co., Ltd., Guelph Ont.
LAWN SWINGS
Stratford Mfg. Co., Ltd., Stratford, Ont.
LAVATORIES, enameled
Amherst Foundry Co., Ltd., Amherst, N.S.
LAMPS (ELECTRIC)
The Dalyte Electric Limited, Guelph, Ont.
LAUNDRY SINKS
Amherst Foundry Co., Ltd., Amherst, N.S.
LEAD
*Consolidated Mining & Smelting Co. of Canada, Ltd., Montreal.
LEAD GRINDERS
Benjamin Moore & Co., Ltd., Toronto, Ont.
LEAD PIPE
*Hoyt Metal Co., Toronto, Ont.
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
Toronto Plate Glass Importing Co., Ltd., Toronto, Ont.
*The Canada Metal Co., Toronto.
LEAD SHEET
Toronto Plate Glass Importing Co., Ltd., Toronto, Ont.
LEATHER
The Robson Leather Co., Ltd., Oshawa, Ont.
LEATHER, bookbinders'
Clarke & Clarke, Ltd., Toronto.
LEATHER, fancy
Clarke & Clarke, Ltd., Toronto.
LEATHER GOODS
Lamontagne, Ltd., Montreal, Que
LEATHER GOODS, Fine
Federated Leather Goods Co., Ltd., Montreal, Que.
Canadian Leather Products, Ltd., Toronto, Ont.
LEATHER, hemlock, union and oak sole
The Breithaupt Leather Co., Ltd., Kitchener, Ont.
LEATHER, patent colt and side leather
*A. R. Clarke & Co., Ltd., Toronto
LEATHER, sheep skin, etc.
Clarke & Clarke, Ltd., Toronto.
LEATHER, upholstering
Clarke & Clarke, Ltd., Toronto.
LEATHER, upper
A. Davis & Son., Ltd., Kingston, Ont.
King Brothers Co., Ltd., Whitby, Ont.
LINK-BELT, Ewart and saw mill riveted
*Canadian Link-Belt Co., Toronto
LINOLEUM
Dominion Oil Cloth and Linoleum Co., Ltd., Montreal, Que.
LITHOGRAPHERS
American Bank Note Co., Ottawa, Ont.
Consolidated Lithographing and Mfg. Co., Ltd., Montreal, Que.
Harris Lithographing Co., Ltd., Toronto, Ont.
The Federated Press, Limited, Montreal, Que.
LOCKERS
*Canada Wire & Iron Goods Co., Hamilton, Ont.
*Dennis Wire & Iron Works Co., London, Ont.
*Geo. B. Meadows, Wire, Iron and Brass Works Co., Toronto. Ont.
LOCOMOTIVES, industrial
*Montreal Locomotive Works, Ltd., Montreal. Que.
LOCOMOTIVE & MARINE BRASS WORKS
The James Morrison Brass Mfg. Co., Ltd., Toronto.
LOOSE LEAF SYSTEMS
Copeland-Chatterson Co., Ltd., Brampton, Ont.
LUBRICATING FLAKE GRAPHITE
Black Donald Graphite Company, Limited, Calabogie, Ont.
LUGS, for silos and water tanks
*Ontario Wind Engine & Pump Co., Ltd., Toronto.
LUMBER
The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.
LUMBER, asbestos
*Eureka Mineral Wool & Asbestos Co., Toronto, Ont.
LUMBER, spruce and pine, cedar railway ties and shingles
*Bathurst Lumber Co., Ltd., Bathurst, N.B.
LUMBER, red pine and spruce
Gillies Bros., Ltd., Braeside, Ont.
LUMBER, White pine
Gillies Bros., Ltd., Braeside, Ont.
LUMBERING BLANKETS
Slingsby Mfg. Co., Ltd., Brantford, Ont.
MACHINE DESIGNING.
Harold C. Shipman & Co., Ottawa, Ont.
MACHINE KNIVES
*Galt Knife Co., Ltd.
*E. C. Atkins & Co., Inc., Hamilton, Ont.
Henry Disston & Sons, Toronto.
MACHINE TOOLS
*Canada Machinery Corporation, Ltd., Galt, Ont
*John Bertram & Sons Co., Ltd., Dundas, Ont.
MACHINE WORK, special and repairs
*Canadian Rumely Co., Ltd., Toronto, Ont.
MACHINERY, special, designing and developing.
Larsen & Shaw, Ltd., Walkerton.
MACHINERY AND UTENSILS FOR BAKERS
Fletcher Mfg. Co., Ltd., Toronto.
MACHINERY AND UTENSILS FOR CANDY
Fletcher Mfg. Co., Ltd., Toronto.
MACHINERY AND UTENSILS FOR ICE CREAM
Fletcher Mfg. Co., Ltd., Toronto.
MACHINERY, Conveying
*Canadian Link-Belt Company, Ltd., Toronto, Ont.
*Canadian Mathews Gravity Carrier Co., Ltd., Toronto.
MACHINERY, flour mill
*Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
MACHINERY, ice cream
J. J. McLaughlin, Ltd., Toronto.
MACHINERY, grinding
*Canadian Hart Wheels, Ltd., Hamilton, Ont.
*Canadian Mead Morrison Co., Ltd., Montreal, Que.
J. & R. Weir, Montreal, Que.
*Northern Crane Works, Ltd., Walkerville, Ont.
MACHINERY, iron working
*Canada Machinery Corporation, Ltd., Galt, Ont.
*John Bertram & Sons Co., Ltd., Dundas, Ont.
MACHINERY, pulp mill
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.
*Dominion Engineering Works, Limited, Montreal, Que.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.
MACHINERY, punching and shearing
*Canada Machinery Corporation, Ltd., Galt, Ont.
*John Bertram & Sons Co., Ltd., Dundas, Ont.
MACHINERY, railroad and car-shop
*Canada Machinery Corporation, Ltd., Galt, Ont.
*John Bertram & Sons Co., Ltd., Dundas, Ont.
MACHINERY, roadmaking
Sawyer-Massey Co., Ltd., Hamilton, Ont.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.
MACHINERY, sawmill
The E. Long Mfg. Co., Ltd., Orillia, Ont.
P. Payette & Co., Pentanguishene, Ont.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.
*Yates, P. B., Machine Co., Ltd., Hamilton, Ont.
MACHINERY, sheet metal working
*Canada Machinery Corporation, Ltd., Galt, Ont.
MACHINERY, woodworking
*Canada Machinery Corporation, Ltd., Galt, Ont.
*Yates, P. B., Machine Co., Ltd., Hamilton, Ont.
Preston Woodworking Machinery Co., Ltd., Preston, Ont.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.
MAGNESITE
*Canadian Carbonate Co., Montreal. Que.
MALLEABLE IRON CASTINGS
Malleable Castings Co., Ltd., Smith's Falls, Ont.
*Galt Malleable Iron Co., Ltd., Galt, Ont.
MATCHERS
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.
MATCHES
*The E. B. Eddy Co., Ltd., Hull, Que.
MECHANICAL STOKERS
*Under-feed Stoker Co. of Canada, Ltd., Toronto.
METAL, babbitt
Alonzo W. Spooner, Ltd., Port Hope, Ont.
*Canada Metal Co., Toronto, Ont.
METAL CEILINGS
*The Pedlar People, Ltd., Oshawa, Ont.
*The A. B. Ormsby Co., Ltd., Toronto, Ont.
METAL LATH
*The Pedlar People, Ltd., Oshawa, Ont.
METAL LATH
*Trussed Concrete Steel Company of Canada, Ltd., Walkerville, Ont.
METAL PACKING
*Garlock Packing Co., Hamilton, Ont.
METAL, spinning and stamping
*The Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.
METAL PROTECTIVE PAINTS
Sturgeons Limited, Toronto.
METAL SAWS
*E. C. Atkins & Co., Inc., Hamilton, Ont.
METAL SHINGLES
*The Pedlar People, Ltd., Oshawa, Ont.
*The A. B. Ormsby Co., Ltd., Toronto, Ont.
METAL STAMPING
W. H. Banfield & Sons, Toronto.
MILK DEALERS' MACHINERY AND SUPPLIES
De Laval Dairy Supply Co., Ltd., Peterboro, Ont.
MILLBOARD, asbestos
*Eureka Mineral Wool & Asbestos Co., Toronto.
MILLING CUTTERS
*Pratt & Whitney Co. of Canada, Dundas, Ont.
MILLING MACHINES
*Ford Smith Machine Co., Ltd., Hamilton, Ont.
MILL RIVITED
*Canadian Link-Belt Company, Ltd., Toronto, Ont.
MITTS AND GLOVES, Indian, tan, red deerskins
Holt, Renfrew, Ltd., Quebec, Que.
*A. R. Clarke & Co., Ltd., Toronto.
MIXERS, chocolate, dough and paint
Fletcher Mfg. Co., Ltd., Toronto.
MOCCASINS AND SLIPPERS, Indian tanned leathers
Holt, Renfrew, Ltd., Quebec, Que.
MONEL METAL
*International Nickel Co. of Canada, Ltd., Toronto.
MORTISERS
*Canada Machinery Corporation, Ltd., Galt, Ont.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.
MOTION PICTURES
Pathescope of Canada, Limited, Toronto.
Filmcraft Industries, Limited, Toronto, Ont.
MOTOR CARS
*Ford Co. of Canada, Ford, Ont.
MOTORS, electric (alternating current)
*Canadian Westinghouse Co., Ltd., Hamilton, Ont.
*Jones & Moore Electric Co., Ltd., Toronto, Ont.
*Canadian Crocker-Wheeler Co., Ltd., St. Catharines, Ont.
*T. & H. Electric Co., Hamilton, Ont.
MOTORS, electric (direct current)
*Canadian Westinghouse Co., Ltd., Hamilton, Ont.
*Jones & Moore Electric Co., Ltd., Toronto, Ont.
*T. & H. Electric Co., Hamilton.
MOTORS, electric (repairing)
*T. & H. Electric Co., Hamilton.
MOTOR TRUCKS
Maplelcaf Manufacturing Company, Ltd., Monsatt[illegible] Que.
MOULDERS
*Canada Machinery Corporation, Ltd., Galt, Ont.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.
NAILS
*The Steel Co. of Canada, Ltd. Hamilton, Ont.
NAILS, copper
Parmenter & Bullock Co., Ltd. Gananoque, Ont.
NAILS, wire
Parmenter & Bullock Co., Ltd. Gananoque, Ont.
NAILS.
*Laidlaw Bale Tie Co., Ltd., Hamilton, Ont.

* For Display Advertisement see Index, Page 41

NAPHTHA
*The Imperial Oil Co., Ltd., Toronto, Ont.
NICKEL CASTINGS
*International Nickel Co. of Canada, Ltd., Toronto.
NICKEL METAL
*Deloro Smelting & Refining Co., Ltd., Deloro, Ont.
*International Nickel Co. of Canada, Ltd., Toronto.
NICKEL OXIDE
*Deloro Smelting & Refining Co., Ltd., Deloro, Ont.
Coniagas Reduction Co., Ltd., St. Catharines, Ont.
*International Nickel Co. of Canada, Ltd., Toronto.
NUTS
*John Morrow Screw & Nut Co., Ltd., Ingersoll, Ont.
*The National Acme Mfg. Co., Montreal, Que.
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
OAKUM, plumbers, Canadian Navy
Factory Waste & Metal Co., Montreal, Que.
OAT CRUSHERS AND FLAKERS
J. Fleury's Sons, Aurora, Ont.
OFFICE CHAIRS, Etc.
The Macey Office Equipment Co., Toronto.
OFFICE DESKS
*Goderich Organ Co., Goderich, Ont
OFFICE EQUIPMENT
*Office Specialty Co., Newmarket, Ont.
OFFICE FURNITURE
*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.
OILS
*A. Ramsay & Son Co., Montreal. Que.
OIL FILTRATION AND CIRCULATING SYSTEMS
*S. F. Bowser & Co., Toronto, Ont.
OIL STORAGE SYSTEMS, self-measuring
*S. F. Bowser & Co., Toronto, Ont.
OIL COMPANIES
*Canadian Oil Cos., Toronto.
Commercial Oil Co., Ltd., Hamilton, Ont.
*Imperial Oil Co., Toronto.
OILS (petroleum products)
*British American Oil Co., Ltd., Toronto, Ont.
*The Imperial Oil Co., Toronto.
OILS, road
*The Barrett Co., Ltd., Toronto and Montreal.
OILCLOTHS, floor and table
Dominion Oil Cloth and Linoleum Co., Ltd., Montreal, Que.
ORGANS
Casavant Freres, Limitee, St. Hyacinthe, Que.
*Goderich Organ Co., Goderich, Ont.
ORGANS, parlor
*Goderich Organ Co., Goderich, Ont.
ORGANS, pipe
Casavant Freres, Limitee, St. Hyacinthe, Que.
ORGANS, reed
Bell Piano & Organ Co., Ltd., Guelph, Ont.
ORNAMENTAL IRON WORK
*Canada Wire & Iron Goods Co., Hamilton, Ont.
*Dennis Wire & Iron Works Co., London, Ont.
*The Geo. B. Meadows, Toronto Iron & Brass Goods Works Co., Ltd., Toronto, Ont.
*McGregor & McIntyre, Ltd., Toronto, Ont.
OVERALLS
Peerless Overall Co., Rock Island, Que.
Walker Pant & Shirt Co., Walkerville and Chatham, Ont.
OVERCOATINGS
Rosamond Woollen Co., Almonte, Ont.
OVERHEAD RUNWAYS
*MacKinnon Steel Co., Ltd., Sherbrooke, Que.
*Richards-Wilcox Canadian Co Ltd., London, Ont.

OXY-ACETYLENE WELDING
*L'Air Liquide Society, Montreal, Que.
*The Prest-O-Lite Co., Inc., Toronto
OXYGEN
Dominion Oxygen Co., Ltd., Toronto.
*L'Air Liquide Society, Montreal, Que.
PACKING BOXES
Barchard & Co., Ltd., Toronto.
PACKING, engine
*Garlock Packing Co., Hamilton, Ont.
PACKING, Metallic-Flexible
Beveridge Supply Co., Ltd., Montreal, Que.
PACKING, rubber
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
*Gutta Percha & Rubber Mfg. Co. of Toronto, Ltd.
*Jenkins Bros., Ltd., Montreal, Que.
PAD HOOKS
Parmenter & Bulloch Co., Ltd., Gananoque, Ont.
PAILS AND TUBS, wooden
The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.
PAINTERS' SUPPLIES
A. Muirhead Co., Ltd., Toronto.
PAINTING MACHINES
Spramotor Company, London, Ont.
PAINTS AND VARNISHES
Berry Brothers, Inc., Walkerville, Ont.
A. Muirhead Co., Ltd., Toronto.
Benjamin Moore & Co., Ltd., Toronto, Ont.
Dominion Paint Works, Limited, Walkerville, Ont.
*The Imperial Varnish & Color Co., Ltd., Toronto, Ont.
The Staneland Co., Ltd., Victoria, B.C.
*A Ramsay & Sons Co., Montreal, Que.
Standard Paint Co. of Canada, Ltd., Montreal, Que.
PAINTS, preservative
Dominion Paint Works, Limited, Walkerville, Ont.
Standard Paint Co. of Canada Ltd., Montreal, Que.
*The Barrett Co., Ltd., Toronto and Montreal.
PAPER BOARDS & BAGS
Beveridge Supply Co., Ltd., Montreal, Que.
PAPER BOXES
Standard Paper Box Company, Ltd., Montreal, Que.
King Paper Box Co., Ltd., Montreal, Que.
PAPER, coated, book and label
*Provincial Paper Mills, Ltd., Georgetown, Ont.
PAPER, coated box board
*Provincial Paper Mills, Ltd., Georgetown, Ont.
PAPER, coated cover
*Provincial Paper Mills, Ltd., Georgetown, Ont.
PAPER, envelope
*Provincial Paper Mills, Ltd., Georgetown, Ont.
The Toronto Paper Mfg. Co., Cornwall, Ont.
PAPER, enamelled blotting
*Provincial Paper Mills, Ltd., Georgetown, Ont.
PAPER, label
*Provincial Paper Mills, Ltd., Georgetown, Ont.
PAPER, ledger
*Howard Smith Paper Mills, Ltd., Montreal, Que.
*Rolland Paper Co., Ltd., Montreal, Que.
The Toronto Paper Mfg. Co., Cornwall, Ont.
PAPER, super-book
The Toronto Paper Mfg. Co., Cornwall, Ont.
PAPER, writing
The Toronto Paper Mfg. Co., Cornwall, Ont.
*Howard Smith Paper Mills, Ltd., Montreal, Que.
*Rolland Paper Co., Ltd., Montreal, Que.
PAPERS, bond
*Howard Smith Paper Mills, Ltd., Montreal, Que.
*Rolland Paper Co., Ltd., Montreal, Que.

PAPERS, building
*Bathurst Lumber Co., Ltd., Bathurst, N.B.
*The Riordon Pulp & Paper Co., Montreal, Que.
Standard Paint Co. of Canada, Ltd., Montreal, Que.
PARLOR SUNDRIES
The Geo. McLagan Furniture Co., Ltd., Stratford, Ont.
PATENTS
Fetherstonhaugh & Co., Toronto.
*Ridout & Maybee, Toronto, Ont.
*Harold C. Shipman & Co., Ottawa.
PATENT LITIGATION
*Ridout & Maybee, Toronto, Ont.
*Harold C. Shipman & Co., Ottawa, Ont.
PAVING MATERIAL
*Trussed Concrete Steel Company of Canada, Ltd., Walkerville, Ont.
PAY ROLL AUDITS
*International Business Machines, Ltd., Toronto, Ont.
PERFORATED METALS
*Canada Wire & Iron Goods Co., Hamilton, Ont.
PERFORATED MUSIC ROLLS
The Otto Higel Co., Ltd., Toronto.
PERFUMES AND TOILET PREPARATIONS
Sovereign Perfumes, Ltd., Toronto.
PETROLEUM PRODUCTS
*The Imperial Oil Co., Ltd., Toronto, Ont.
PHONOGRAPH MOTORS
W. H. Banfield & Sons, Toronto.
PHOTO MAILERS
*Thompson & Norris Co., of Canada, Ltd., Toronto and Montreal.
PIANO ACTIONS
The Otto Higel Co., Ltd., Toronto.
PIANO KEYS
The Otto Higel Co., Ltd., Toronto.
PIANO, player actions
The Otto Higel Co., Ltd., Toronto.
PIANOS AND PLAYER PIANOS
Bell Piano & Organ Co., Ltd., Guelph, Ont.
PIANO STOOLS AND BENCHES
*Goderich Organ Co., Goderich, Ont.
PIG IRON
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
*M. A. Hanna & Co., Toronto.
*Algoma Steel Corporation.
PINS, society, emblems and badges
*Caron Bros., Montreal, Que.
PIPE, cast iron, for water and gas
National Iron Works, Ltd., Toronto, Ont.
PIPE COUPLINGS
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
PIPE COVERINGS
*Eureka Mineral Wood & Asbestos Co., Toronto, Ont.
PIPES, culvert
*The Pedlar People, Ltd., Oshawa, Ont.
PIPE AND NIPPLES, black and galvanized
*Canadian Tube & Iron Co., Ltd., Montreal, Que.
PIPE, sewer
Hamilton & Toronto Sewer Pipe Co., Ltd., Hamilton, Ont.
PIPE, soil and fittings
Anthes Foundry, Ltd., Toronto and Winnipeg.
Warden King Ltd., Montreal, Que.
PISTON RODS
*The Canadian Drawn Steel Co., Ltd., Hamilton, Ont.
*Union Drawn Steel Co., Ltd., Hamilton, Ont.
PLANERS
*Canada Machinery Corporation, Ltd., Galt, Ont.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont
PLASTERING TROWELS
*E. C. Atkins & Co., Inc., Hamilton, Ont.
PLOWS
J. Fleury's Sons, Aurora, Ont.
PNEUMATIC DRILLS
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.

PLUMBERS' SUPPLIES
The Garth Co., Montreal, Que.
The James Morrison Brass Mfg. Co., Ltd., Toronto, Ont.
Toronto Plate Glass Importing Co., Ltd., Toronto, Ont.
POLE LINE MATERIAL (wooden insulator top pins, side blocks, pole steps, cross arms)
The Lachute Shuttle Co., Ltd., Lachute Mills, P.Q.
POLES, flag
*Ontario Wind Engine & Pump Co., Ltd., Toronto, Ont.
POLISHING MACHINERY
*Ford Smith Machine Co., Ltd., Hamilton, Ont.
PORK PACKERS AND CHEESE EXPORTERS
The Ingersoll Packing Co., Ltd., Ingersoll, Ont.
POWDER, blasting
Canadian Explosives, Ltd., Montreal, Que.
POWER TRANSMISSION MACHINERY
Dodge Manufacturing Co. of Canada, Ltd., Toronto.
POWER PRESSES
*Hydraulic Machinery Co., Ltd., Montreal, Que.
PRESSES, hydraulic
*The Hydraulic Machinery Co., Limited. Montreal.
PRESSES, sheet metal stamping
*Canada Machinery Corporation, Ltd., Galt, Ont.
PRESSES, veneer
*Canada Machinery Corporation, Ltd., Galt, Ont.
PRINTING AND LITHOGRAPHING
Lawson & Jones, Ltd., London, Ont.
The Federated Press, Limited, Montreal, Que.
PRINTING & LITHOGRAPHIC INKS.
Charles Bush, Limited, Toronto.
PULLEYS
*Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
PULLEYS, Fibre
*The Diamond State Fibre Co. of Canada, Ltd., Toronto.
PULLEYS, wood split
*Bernard Industrial Co., Fortierville, P.Q.
PULLEYS, Wood Split, Iron and steel.
Dodge Manufacturing Co. of Canada, Ltd., Toronto.
PULP, bleached sulphite
*Riordan Sales Co., Ltd., Montreal.
PULP, unbleached sulphite
*Riordan Sales Co., Ltd., Montreal.
PULP, sulphate and sulphite
*Bathurst Lumber Co., Ltd., Bathurst, N.B.
PULP AND PAPER MILL MACHINERY
*The Hydraulic Machinery Co., Limited, Montreal.
PUMPS
Aylmer Pump & Scale Co., Aylmer, Ont.
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.
*Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
*E. Leonard & Sons, Ltd., London, Ont.
*Ontario Wind Engine & Pump Co., Ltd., Toronto, Ont.
*Smart-Turner Machine Co., Ltd., Hamilton, Ort.
*The Electric Steel & Metals Co., Ltd., Welland. Ont.
PUMPS, boiler feed
*Smart-Turner Machine Co., Ltd., Hamilton, Ont.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
PUMPS, centrifugal
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.
*Canadian Mead Morrison Co., Ltd., Montreal, Que.
*Dominion Engineering Works, Limited. Montreal, Que.
*Dominion Forge & Stamping Co., Ltd., Walkerville, Ont.
*The Goldie & McCulloch Co., Ltd., Galt. Ont.
*Smart-Turner Machine Co., Ltd., Hamilton, Ont.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.

*For Display Advertisement see Index. Page 41

PUMPS, hydraulic
*The Hydraulic Machinery Co., Limited, Montreal.

PUMPS, turbine and reciprocating
*Smart-Turner Machine Co., Ltd., Hamilton, Ont.

PUNCHES
*Pratt & Whitney Co., Dundas, Ont.

RADIATORS
Taylor-Forbes Co., Ltd., Guelph, Ont.
Warden King Ltd., Montreal, Que.

RAILS (STEEL).
*Algoma Steel Corporation.

RAILINGS, brass and iron
*Dennis Wire & Iron Works Co., London, Ont.

RAILROAD EQUIPMENT
British Empire Steel Corporation, Limited, Montreal, Que.

RAILWAY SUPPLIES
*Canadian Steel Foundries, Ltd., Montreal, Que.
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
B. J. Coghlin Co., Ltd., Montreal, Que.

READY-TO-WEAR GARMENTS, ladies'
H. C. Boulter Co., Ltd., Toronto.

REAMERS
*Pratt & Whitney Co., Dundas, Ont.
*Butterfield & Co., Rock Island, P.Q.

RECEPTACLES, fibre
*The Diamond State Fibre Co. of Canada, Ltd., Toronto.

REFRIGERATORS
Sanderson-Harold Co., Ltd., Paris, Ont.

REFRIGERATING MACHINERY
The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.

REFRIGERATING EQUIPMENT.
Canadian Ice Machine Co., Ltd., Toronto, Ont.

REFRIGERATORS, store, homes and institutions
Ham & Nott Co., Ltd., Brantford, Ont.
*John Hillock & Co., Ltd., Toronto.

REINFORCEMENT BARS
*Burlington Steel Co., Ltd., Hamilton, Ont.
*The Steel Co. of Canada, Ltd., Hamilton, Ont.

REINFORCED CONCRETE
*Trussed Concrete Steel Company of Canada, Ltd., Walkerville, Ont.

REINFORCEMENT FOR CONCRETE
*Canada Wire & Iron Goods Co., Hamilton, Ont.

REINFORCEMENT FOR CONCRETE ROOFING, metal
*The Pedlar People, Ltd., Oshawa, Ont.

REVOLVING DOORS
*A. B. Ormsby Co., Ltd., Toronto

RINGS, gold
*Caron Bros., Montreal, Que.

RIVETS
*Canadian Tube & Iron Co., Ltd., Montreal, Que.
*The Steel Co. of Canada, Ltd., Hamilton, Ont.

RIVETS, bifurcated and tubular
Parmenter & Bullock Co., Ltd., Gananoque, Ont.

RIVETS AND BURRS, iron, copper and brass
Parmenter & Bullock Co., Ltd., Gananoque, Ont.

ROCK DRILLS
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.

ROLLING STEEL DOORS
*A. B. Ormsby Co., Ltd., Toronto.

ROOFING, metal
*A. B. Ormsby Co., Ltd., Toronto.

ROOFINGS, plastic, liquid, rubber
Beveridge Supply Co., Ltd., Montreal, Que.

ROOFING, ready to lay
Standard Paint Co. of Canada, Ltd., Montreal, Que.
*The Barrett Co., Ltd., Toronto and Montreal.

ROOF TRUSSES
*The Canadian Bridge Co., Ltd., Walkerville, Ont.
*Dominion Bridge Co., Ltd., Montreal, Que.

ROPE
*Doon Twines, Limited, Kitchener, Ontario.
*Shurly & Derrett, Ltd., Toronto.

ROPE, cotton
Hamilton Cotton Co., Hamilton, Ont.

RUBBER FOOTWEAR
*Gutta Percha & Rubber Ltd., Toronto, Ont.
The Miner Rubber Co., Ltd., Grandy, Que.
Ames—Holden—McCready, Limited, Montreal, Que.

RUBBER GOODS
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
*Gutta Percha & Rubber Limited, Toronto.
Ames—Holden—McCready, Limited, Montreal, Que.

RUBBER MACHINERY
*The Hydraulic Machinery Co., Limited. Montreal.

RUBBER MACHINERY MAKERS
The Canadian Consolidated Rubber Co., Ltdd., Rubber Machinery Shops, Kitchener, Ont.

RUBBER MILL MACHINERY
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.

RUBBER PACKING
*Garlock Packing Co., Hamilton, Ont.

RULES
The Lufkin Rule Co. of Canada, Ltd., Windsor, Ont.

SADDLERY HARDWARE
*Dominion Forge & Stamping Co., Walkerville, Ont.

SAFES
*Goldie & McCulloch Co., Ltd. Galt, Ont.

SALT
*Canadian Salt Co., Ltd., Windsor, Ont.
Dominion Salt Co., Ltd., Sarnia, Ont.

SAMPLE CASES
*The M. Langmuir Mfg. Co., of Toronto, Ltd., Toronto, Ont.

SAND (For all Purposes)
Carrol Brothers, Sherkston, Ont
J. Eveleigh & Co., Ltd., Montreal, Que.

SAND RAMMERS
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.

SANITARY PAPER TOWELS
*E. B. Eddy Co., Ltd., Hull, Que.

SASH CORD, cotton
Hamilton Cotton Co., Hamilton, Ont.

SAVE-ALLS
*The Hydraulic Machinery Co., Limited. Montreal.

SAW SHARPENING MACHINERY
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

SAWS
*E. C. Atkins & Co., Ltd., Hamilton, Ont.
Henry Disston & Sons, Ltd., Toronto, Ont.
Shurly & Deitrich, Galt, Ont.

SAWS, cross-cut and band
*Canada Machinery Corporation, Ltd., Galt, Ont.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.
Shurly & Deitrich, Galt, Ont.

SAWS, circular mill
Shurly & Deitrich, Galt, Ont.

SAWS, of all kinds
Simonds Canada Saw Co., Ltd., Montreal, Que.

SAWS, rip
*Canada Machinery Corporation, Ltd., Galt, Ont.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.
Shurly & Deitrich, Galt, Ont.

SAWMILLS
*The Waterous Engine Works Co., Ltd., Brantford, Ont.

SCALES
*Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.

SCREENS
*Canada Wire & Iron Goods Co., Hamilton, Ont.

SCREEN DOORS AND WINDOWS
Sanderson-Harold Co., Ltd., Paris, Ont.
Ham & Nott Co., Ltd., Brantford, Ont.

SCREENS; Folding Draft
The Stratford Mfg. Co., Limited, Stratford, Ont.

SCREWS
*John Morrow Screw & Nut Co., Ltd., Ingersoll, Ont.
*National Acme Company, Montreal, Que.
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
*Torrington Company, Limited, Upper Bedford, Que.

SCREW PLATES
*Butterfield & Co., Rock Island, P.Q.

SEATS; Park and Grand Stand
The Stratford Mfg. Co., Limited, Stratford, Ont.

SECURITIES, engraved
American Bank Note Co., Ottawa, Ont.

SERGES
Rosamond Woollen Co., Almonte, Ont.

SEWAGE DISPOSAL SYSTEMS
Anthes Foundry, Ltd., Toronto.

SEWAGE SCREENS
*The Hydraulic Machinery Co., Limited, Montreal.

SHAFTING
*Canadian Drawn Steel Co., Ltd., Hamilton, Ont.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Union Drawn Steel Co., Ltd., Hamilton, Ont.

SHANTY BLANKETS
Slingsby Mfg. Co., Ltd., Brantford, Ont.

SHAPERS
*Canada Machinery Corporation, Ltd., Galt, Ont.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.

SHEAR BLADES, iron
*Galt Knife Co., Ltd.
The Peter Hay Knife Co., Ltd., Galt, Ont.

SHEATHING
*The Barrett Co., Ltd., Toronto and Montreal.

SHEATHING, asbestos corrugated
*Eureka Mineral Wool & Asbestos Co., Toronto, Ont.
Dodge Manufacturing Co. of Canada, Ltd., Toronto.

SHEET METAL STAMPINGS
Acme Stamping & Tool Works, Ltd., Hamilton, Ont.
*The Pedlar People, Ltd., Oshawa, Ont.
*The A. B. Ormsby Co., Ltd., Toronto, Ont.

SHEETS, fibre
*The Diamond State Fibre Co. of Canada, Ltd., Toronto.

SHEETS, galvanized
*Dominion Sheet Metal Co., Ltd., Hamilton, Ont.
*The Pedlar People, Ltd., Oshawa, Ont.

SHINGLES
*Bathurst Lumber Co., Ltd., Bathurst, N.B.

SHINGLE SAWS
*E. C. Atkins & Co., Inc., Hamilton, Ont.

SHINGLE STAINS
Sturgeons, Limited, Toronto.

SHIP BUILDERS
J. & R. Weir, Montreal, Que.

SHIRTS
John W. Peck & Co., Ltd., Montreal, Que.

SHIRTS, workmen's
*A. R. Clarke & Co., Ltd., Toronto.

SHOE PEGWOOD
O. Chalifour, Quebec, Que.

SHOE LININGS
Galt Knitting Co., Ltd., Galt, Ont.

SHOOKS
Barchard & Co., Ltd., Toronto.

SIGNAL CELLS-RAILWAY
*Canadian National Carbon Co., Ltd., Toronto.

SILENT CHAIN DRIVES
*Canadian Link-Belt Company, Ltd., Toronto, Ont.

SILVER BULLION
Coniagas Reduction Co., Ltd., St Catharines, Ont.
*Deloro Smelting & Refining Co., Ltd., Deloro, Ont.

SILVERSMITH
Standard Silver Co., Toronto, Ont

SILVERWARE, sterling
Roden Bros., Ltd., Toronto, Ont.

SINKS, enamelled
Amherst Foundry Co., Ltd., Amherst, N.S.

SKIFFS
Peterboro Canoe Co., Ltd., Peterboro, Ont.

SKYLIGHTS
*A. B. Ormsby Co., Ltd., Toronto.
*The Pedlar People, Ltd., Oshawa, Ont.

SLOTTERS
*Canada Machinery Corporation, Ltd., Galt, Ont.

SMOKE CONSUMERS
*Under-Feed Stoker Company of Canada, Limited, Toronto.

SMOKE-STACKS
*Canadian Chicago Bridge & Iron Co., Ltd., Bridgeburg, Ont.
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*E. Leonard & Sons, Limited, London, Ont.
*MacKinnon Steel Co., Ltd., Sherbrooke, Que.
*Steel Trough & Machine Co., Ltd., Tweed, Ont.

SOAPS
J. Barsalou & Co., Ltd., Montreal.

SODA ASH
Brunner, Mond Canada, Limited, Amherstburg, Ont.

SODA WATER FOUNTAINS
J. J. McLaughlin, Ltd., Toronto.

SODA WATER FOUNTAINS AND ACCESSORIES
Fletcher Mfg. Co., Ltd., Toronto.

SOIL PIPE
Anthes Foundry, Ltd., Toronto.

SOLDER
Alonzo W. Spooner, Ltd., Port Hope, Ont.
*Canada Metal Co., Toronto, Ont.
*Hoyt Metal Co., Toronto, Ont.
Magnolia Metal Co. of Canada, Ltd., Montreal, Que.

SOLDER, silver
Geo. H. Lees & Co., Hamilton, Ont.

SOLDER, wire and bar
American Can Co., Montreal, and Hamilton.

SNOWSHOES
Holt, Renfrew, Ltd., Quebec, Que.

SPECIAL MACHINERY
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.

SPECIALTIES, SWAGED AND THREADED WIRE
*Torrington Company, Limited, Upper Bedford, Que.

SPELTER
*Consolidated Mining & Smelting Co. of Canada, Ltd., Montreal.

SPIRAL CONVEYORS
*Canadian Mathews Gravity Carrier Co., Ltd., Toronto, Ont.
Dodge Manufacturing Co. of Canada, Ltd., Toronto.

SPLIT PEAS
H. Murton, Ltd., Guelph, Ont.

SPOOLS
Canada Spool & Bobbin Co., Ltd., Walkerton, Ont.

SPORTING MEDALS AND TROPHIES
Roden Bros., Ltd., Toronto, Ont.

SPRAYERS
Spramotor Co., London, Ont.

SPRING COTTERS
*Richards-Wilcox Canadian Co., Ltd., London, Ont.

SPRINGS
*Canadian Steel Foundries, Ltd., Montreal, Que.
B. J. Coghlin Co., Ltd., Montreal.
Guelph Spring & Axle Co., Ltd., Guelph, Ont.

SPRINGS, carriage and automobile
Guelph Spring & Axle Co., Ltd.,

SPRING SHACKLE BOLTS
*John Morrow Screw & Nut Co., Ltd., Ingersoll, Ont.

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SPRINKLER SYSTEMS
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
*The Bennett & Wright Co., Ltd., Toronto, Ont.
*Purdy, Mansell, Ltd., Toronto.

SPROCKET WHEELS
*Canadian Link-Belt Company, Ltd., Dodge Manufacturing Co. of Can- Toronto, Ont.

STAINS, creosote shingle
A. Muirhead Co., Ltd., Toronto.

STAMPS, steel, brass and rubber
Pritchard-Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

STAMPINGS, steel, brass, aluminum, etc.
Larsen & Shaw, Ltd., Walkerton.

STATIONERY, office
Harris Lithographing Co., Toronto.

STEAM PIPE AND BOILER COVERINGS, asbestos
*Eureka Mineral Wool & Asbestos Co., Toronto.

STEAM SHOVELS
*Canadian Mead Morrison Co., Ltd., Montreal, Que.

STEAM SPECIALTIES
*C. A. Dunham Co., Ltd., Toronto.

STEAM TRAPS
*C. A. Dunham Co., Ltd., Toronto.

STEEL
*British Empire Steel Corp., Montreal, Que.
*Burlington Steel Co., Ltd., Hamilton, Ont.
*MacKinnon Steel Co., Ltd., Sherbrooke, Que.

STEEL BILLETS AND BLOOMS
*The Steel Co. of Canada, Ltd., Hamilton, Ont.

STEEL BUILDINGS
*The Canadian Bridge Co., Ltd., Walkerville, Ont.
*Dominion Bridge Co., Ltd., Montreal, Que.
*Hamilton Bridge Works Co., Ltd., Hamilton, Ont.
*Maritime Bridge Co., Ltd., New Glasgow, N.S.
*McGregor & McIntyre, Ltd., Toronto, Ont.
*MacKinnon Steel Co., Limited, Sherbrooke, P.Q.
*The Pedlar People, Ltd., Oshawa, Ont.
*The A. B. Ormsby Co., Ltd., Toronto, Ont.

STEEL CASTINGS
Beauchemin & Fils, Ltd., Sorel, Que.
*Canadian Steel Foundries, Ltd., Montreal, Que.
*Dominion Foundries and Steel Co., Ltd., Hamilton, Ont.
*Electric Steel & Metals Co., Ltd. Welland, Ont.

STEEL DOORS, rolling
*The A. B. Ormsby Co., Ltd., Toronto, Ont.

STEEL FILING EQUIPMENT
*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.

STEEL LATH
*Trussed Concrete Steel Company of Canada, Ltd., Walkerville, Ont.

STEEL PLATE WORK
*Canadian Chicago Bridge & Iron Co., Ltd., Bridgeburg, Ont.
The Canadian Des Moines Steel Co., Ltd., Chatham, Ont.
*Canadian Ingersoll Rand Co., Ltd., Sherbrooke, Que.
*Hamilton Bridge Works Co., Ltd., Hamilton, Ont.
*MacKinnon Steel Co., Limited, Sherbrooke, P.Q.
*Toronto Iron Works, Ltd., Toronto.

STEEL RODS
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
*Algoma Steel Corporation.

STEEL SASH
*Canadian Metal Window & Steel Products, Limited, Toronto.
*Dennis Wire & Iron Works Co., London, Ont.
*The A. B. Ormsby Co., Ltd., Toronto, Ont.
*Trussed Concrete Steel Company of Canada, Ltd., Walkerville, Ont.

STEEL SHELVING
*Dennis Wire & Iron Works Co., London, Ont.

STEEL WIRE RODS
*The Steel Co. of Canada, Ltd., Hamilton, Ont.

STELLITE
*Deloro Smelting & Refining Co., Ltd., Deloro and Toronto.

STENCILS, brass
Pritchard-Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

STEREOTYPING
Central Press Agency, Toronto.

STOKERS
*Under-feed Stoker Co. of Canada, Ltd., Toronto, Ont.

STOOLS, steel factory
*Steel Trough & Machine Co., Ltd., Tweed, Ont.

STORAGE BATTERIES
*Prest-O-Lite Company of Canada Limited, Toronto.

STORE FITTINGS
The Canadian Office & School Furniture Co., Ltd., Preston, Ont.

STOVES
Smith Foundry Co., Ltd., Fredericton, N.B.

STOVES AND RANGES
*McClary Mfg. Co., London, Ont.

STRAWS, paper drinking
Fletcher Mfg. Co., Ltd., Toronto

STRUCTURAL STEEL.
*Algoma Steel Corporation.

STRUCTURAL STEEL WORK
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.
*Dominion Bridge Co., Montreal.
*Hamilton Bridge Works Co., Ltd., Hamilton, Ont.
*McGregor & McIntyre, Ltd., Toronto, Ont.
*MacKinnon Steel Co., Ltd., Sherbrooke, Que.
*The Canadian Bridge Co., Ltd. Walkerville, Ont.

SUIT CASES
J. Eveleigh & Co., Ltd., Montreal
*The M. Langmuir Mfg. Co., of Toronto, Ltd., Toronto, Ont.

SULPHUR BURNERS
*The Hydraulic Machinery Co. Limited, Montreal.

SUPERHEATERS, steam
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

SUPERHEATERS, STEAM (Locomotive, Marine, Stationary)
The Superheater Company, Limited, Transportation Building, Montreal, Quebec.

SUPPLY DEALERS
*The Foundation Co., Ltd., Montreal, Que.

SURFACERS
*Canada Machinery Corporation, Ltd., Galt, Ont.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.

SWITCHES, railway
Canadian Ramapo Iron Works Ltd., Niagara Falls, Ont.

SWITCHES AND FROGS
*Canadian Steel Foundries, Ltd., Montreal, Que.

SWITCH STANDS
Canadian Ramapo Iron Works, Ltd., Niagara Falls, Ont.

TABLE COVERS, chenille
Hamilton Cotton Co., Hamilton Ont.

TANKS
*Canadian Chicago Bridge & Iron Company, Ltd., Bridgeburg, Ont.
*Canadian Des Moines Steel Co., Limited, Chatham.
*Hamilton Bridge Works Co., Ltd., Hamilton, Ont.
*E. Leonard & Sons, Ltd., London, Ont.
*MacKinnon Steel Co., Ltd., Sherbrooke, Que.
*Maritime Bridge Co., Ltd., New Glasgow, N.S.
*Ontario Wind Engine & Pump Co., Ltd., Toronto, Ont.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*The Goold Shapley & Muir Co., Limited, Brantford, Ont.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.
*Toronto Iron Works, Ltd., Toronto.
Wm. H. White, Ville St. Pierre, Montreal, Que.

TANKS, elevated steel
*Canadian Chicago Bridge & Iron Co., Ltd., Bridgeburg, Ont.
*Canadian Des Moines Steel Co. Limited, Chatham.

TANKS, steel storage
The Canadian Des Moines Steel Co., Ltd., Chatham, Ont.
*Canadian Ingersoll Rand Co., Ltd., Sherbrooke, Que.
*Canadian Chicago Bridge & Iron Co., Ltd., Bridgeburg, Ont.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*MacKinnon Steel Co., Ltd., Sherbrooke, Que.
*Steel Trough & Machine Co., Ltd. Tweed, Ont.

TANNERS' OILS & GREASES
Salem Oil & Grease Co. of Canada, Limited, Farnham, Que.

TANNERS' SUPPLIES
*McClary Mfg. Co., London, Ont.

TAPS
*Butterfield & Co., Rock Island, P.Q.
*Pratt & Whitney Co., Dundas, Ont.

TAPES, measuring
The Lufkin Rule Co. of Canada, Ltd., Windsor, Ont.

TELEPHONE ACCESSORIES
*Northern Electric Co., Ltd., Montreal, Que.

TERMINALS, electric cable
*Standard Underground Cable Co. of Canada, Ltd., Hamilton, Ont.

TERRA COTTA, architectural
Toronto Plate Glass Importing Co., Ltd., Toronto, Ont.

TEXTILE SUPPLIES (shuttles, bobbins, spools and picker sticks)
The Lachute Shuttle Co., Ltd., Lachute Mills, P.Q.

TIE TAMPERS
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.

TILING, rubber
*Gutta Percha & Rubber Ltd., Toronto, Ont.

TIME RECORDERS
*International Business Machines Co., Ltd., Toronto, Ont.

TINWARE, lithographed
*MacDonald Mfg. Co., Ltd., Toronto, Ont.

TIRES, bicycle, auto, carriage, truck, motorcycle.
*Gutta Percha & Rubber Ltd., Toronto, Ont.

TOOLS, pneumatic
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.

TOOLS, track
B. J. Coghlin Co., Ltd., Hamilton.

TOYS AND GAMES.
A. C. Gilbert-Menzies Co., Ltd., Toronto, Ont.

TRADE MARKS AND PATENT INVESTIGATIONS
Harold C. Shipman & Co., Ottawa, Ont.

TRADE MARKS AND DESIGNS
*Ridout & Maybee, Toronto, Ont.

TRAFFIC SERVICES
Guy Tombs Limited, Montreal., Que.

TRANSFERS, DECALCOMANIA
Canada Decalcomania Co., Ltd., Toronto.

TRANSFORMERS
*The Canadian Crocker-Wheeler Co., Ltd., St. Catharines, Ont.

TRANSLATIONS INTO FRENCH
Raoul Renault, Quebec City.

TRANSMISSION MACHINERY
*Bond Engineering Works., Limited, Toronto.
*Canadian Link Belt Co., Toronto.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.

TRAPS
*C. A. Dunham Co., Ltd., Toronto.

TROLLEYS
*Richard-Wilcox Canadian Co., Ltd., London, Ont.
*Northern Crane Works, Ltd., Walkerville, Ont.

TRUCKS
*Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
*Northern Crane Works, Ltd., Walkerville, Ont.

TRUCKS, brick, tile and lumber
*Waterous Engine Works Co., Ltd., Brantford, Ont.

TRUCKS, motor
Mapleleaf Manufacturing Comp- Ltd., Montreal, Que.
*National Steel Car Co., Ltd., Hamilton, Ont.

TRUCKS FOR OFFICE AND VAULT USE
*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.

TRUNKS
Lamontagne, Ltd., Montreal, Que.
J. Eveleigh & Co., Ltd., Montreal.
*The M. Langmuir Mfg. Co., of Toronto, Ltd., Toronto.

TUBES, ice cream
Fletcher Mfg. Co., Ltd., Toronto.

TUBING, brass and copper
*Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.
Canadian Seamless Wire Co., Toronto, Ont.
*Copper Products, Ltd., Montreal, Que.

TUBING, gold and silver
Canadian Seamless Wire Co., Toronto, Ont.

TUMBLERS, foundry
*Northern Crane Works, Ltd., Walkerville, Ont.
*Smart-Turner Machine Co., Ltd., Hamilton, Ont.

TURBINES, hydraulic
*Dominion Engineering Works, Limited, Montreal, Que.

TURBINES, steam
*The Canadian Crocker-Wheeler Co., Ltd., St. Catharines.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

TURBINE PUMPS
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

TWEEDS
Rosamond Woollen Co., Almonte, Ont.

TWINES
*Doon Twines, Limited, Kitchener, Ontario.
*Shurly & Derrett, Ltd., Toronto.

TWINES, binder
Brantford Cordage Co., Ltd., Brantford, Ont.

TWINES, cotton
Hamilton Cotton Co., Hamilton, Ont.

TWIST DRILLS
*John Morrow Screw & Nut Co., Ltd., Ingersoll.
*Pratt & Whitney Co. of Canada, Dundas Ont.

UNDERWEAR
Galt Knitting Co., Ltd., Galt, Ont.

UNIONS
*Dart Union Co., Ltd., Toronto.

UPHOLSTERED FURNITURE, leather and tapestries
Imperial Rattan Co., Ltd.

* For Display Advertisement see Index, Page 41

VACUUM PUMPS
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

VALVES
*Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
*Kerr Engine Co., Ltd., Walkerville.
*Jenkins Bros., Ltd., Montreal, Que.

VALVES, for steam and water
*Jenkins Bros., Ltd., Montreal.
James Morrison Brass Mfg. Co., Ltd., Toronto, Ont.

VALVES, REDUCING
*Mason Regulator & Engineering Co., Ltd., Montreal, Que.

VARNISH
Berry Brothers, Inc., Walkerville, Ont.

VAULT FITTINGS, steel
*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.

VAULTS AND VAULT DOORS
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

VENTILATORS
*A. B. Ormsby, Ltd., Toronto, Ont.
*The Pedlar People, Ltd., Oshawa, Ont.

WALLPAPERS
Staunton Limited. Toronto.

WALLBOARD, SHEATHING,
Beveridge Supply Co., Limited, Montreal, Que.

WASHERS
*The Steel Co. of Canada, Ltd., Hamilton, Ont.

WASHERS, fibre
*The Diamond State Fibre Co. of Canada, Ltd., Toronto.

WASHERS, plate or wrought
London Rolling Mill Co., Ltd., London, Ont.

WASTE BASKETS, fibre
*The Diamond State Fibre Co. of Canada, Ltd., Toronto.

WASTES, wool and cotton
Factory Waste & Metal Co., Montreal, Que.

WATERPROOF, cement coating
Benjamin Moore & Co., Ltd., Toronto, Ont.
Beveridge Supply Co., Ltd., Montreal, Que.
*The Barrett Co., Ltd., Toronto and Montreal.

WATERPROOF, caselining
Beveridge Supply Co., Limited, Montreal, Que.

WATER PAINTS
Sturgeons Limited, Toronto.

WEBBING, elastic
Hamilton Cotton Co., Hamilton, Ont.

WEBBING, non-elastic
Hamilton Cotton Co., Hamilton, Ont

WELDING APPARATUS AND MATERIALS
*The Presto-O-Lite Co., Toronto.

WELL-DIGGING TOOLS AND MACHINERY
*Ontario Wind Engine & Pump Co., Ltd., Toronto, Ont.

WHEELS, corundum and emery
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

WELL DRILLING TOOLS AND MACHINERY
Oil Well Supply Co., Ltd., Petrolia, Ont.

WHIPS AND LASHES
Lay Whip Co., Rock Island, Que.

WHITE ARSENIC
Coniagas Reduction Co., Ltd., St. Catharines, Ont.

WHITE LEAD
*A. Ramsay & Son Co., Montreal.

WHITEWASHING MACHINES
Spramotor Company, London, Ont.

WINDMILLS
*Ontario Wind Engine & Pump Co., Ltd., Toronto, Ont.

WINDOW SASH
*Trussed Concrete Steel Company of Canada, Ltd., Walkerville, Ont.

WIRE
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
*Laidlaw Bale-Tie Co., Ltd., Hamilton, Ont.
*Frost Steel & Wire Company, Limited, Hamilton, Ontario.

WIRE BALE TIES
*Frost Steel & Wire Co., Limited, Hamilton, Ontario.
*Laidlaw Bale-Tie Co., Ltd., Hamilton, Ont.

WIRE CLOTH
*Canada Wire & Iron Goods Co., Hamilton, Ont.
*B. Greening Wire Co., Limited, Hamilton, Ont.
*C. H. Johnston & Sons, Ltd., Montreal, Que.

WIRE, feeder and trolley
*Standard Underground Cable Co of Canada, Ltd., Hamilton, Ont

WIRE GUARDS
*Canada Wire & Iron Goods Co., Hamilton, Ont.
*B. Greening Wire Co., Limited, Hamilton, Ont.
*C. H. Johnson & Sons, Limited. Montreal, Que.

WIRE, insulated electric
*Standard Underground Cable Co of Canada, Ltd., Hamilton, Ont

WIRE ROPE
Canada Wire & Iron Goods Co., Hamilton.
*Dominion Wire Rope Co., Ltd., Montreal, Que.
*The B. Greening Wire Co., Ltd., Hamilton, Ont.

WIRE, weatherproof
*Standard Underground Cable Co of Canada, Ltd., Hamilton, Ont

WIRE WORK
*C. H. Johnson & Sons, Limited. Montreal, Que.
*Canada Wire & Iron Goods Co., Hamilton, Ont.
*The Geo. B. Meadows, Toronto Iron & Brass Goods Works Co. Ltd., Toronto, Ont.

WOOD
Standard Fuel Co., Toronto, Ont.

WOOD BORERS
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.
*Canada Machinery Corporation, Ltd., Galt, Ont.

WOOD PRESERVATIVES
Sturgeons Limited, Toronto.

WOOD PRINTERS
Barchard & Co., Ltd., Toronto.

WOOD PULP, mechanical
La Cie de Pulpe de Chicoutimi, Chicoutimi, Que.

WOOD SHOP, general work
*Canadian Rumely Co., Ltd., Toronto, Ont.

WOOD SPLIT PULLEYS
*Dodge Mfg. Co., Ltd., Toronto.

WOOL
*H. V. Andrews, Toronto, Ont.

WOOD TURNING
Canada Spool & Bobbin Co., Ltd., Walkerton, Ont.

WORSTED COATINGS AND SUITINGS
Rosamond Woollen Co., Almonte, Ont.

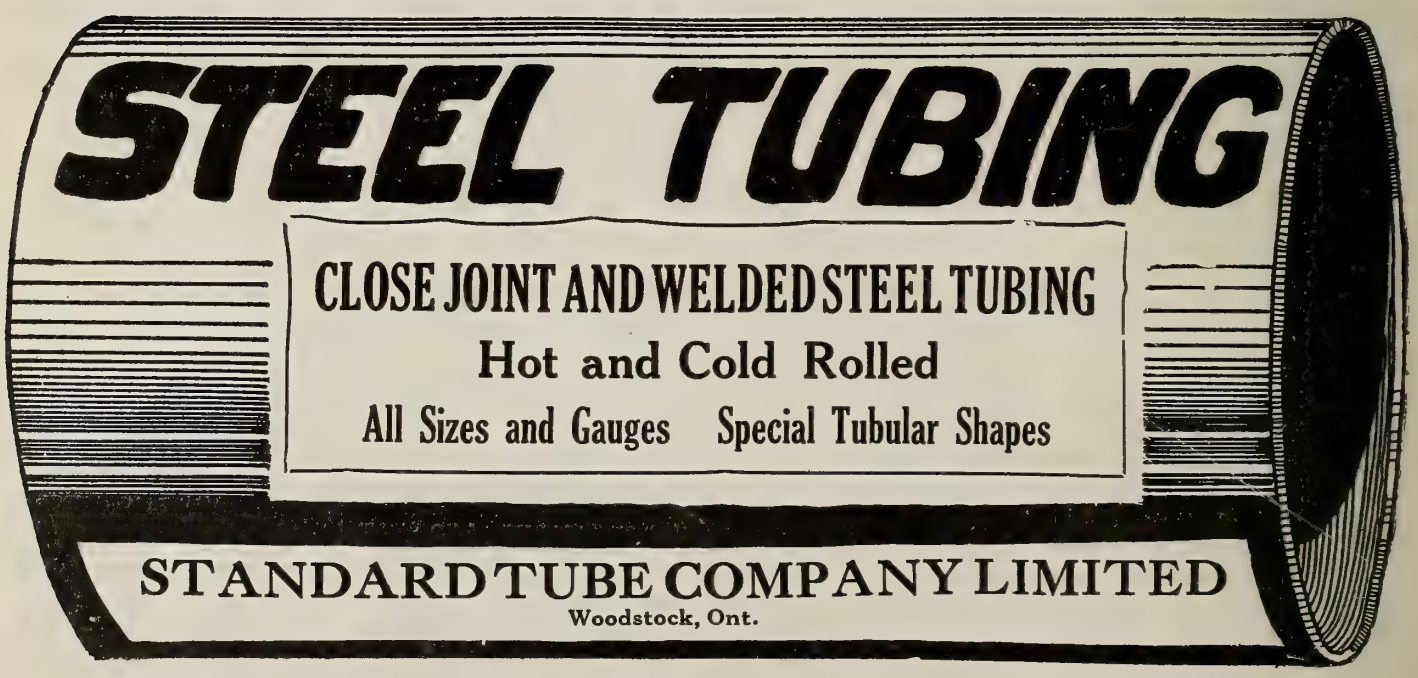
WRAPPERS, book, bottle, etc.
*Thompson & Norris Co., of Canada, Ltd., Toronto and Montreal.

WROUGHT IRON PIPE
*The Steel Co. of Canada, Ltd., Hamilton, Ont.

YARNS, cotton
Hamilton Cotton Co., Hamilton, Ont.

ZINC
*Consolidated Mining and Smelting Co., of Canada, Ltd., Montreal, Que.

ZINC, electrical
*The Canada Metal Co., Toronto.



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